

THE CHINESE RECORDER.

AND

MISSIONARY JOURNAL.

VOL. 3.

FOOCHOW, FEBRUARY, 1871.

No. 9.

TENTH ANNUAL METHODIST MEETING AT FOOCHOW.

BY REV. E. S. MACLAY, D. D.

The following is a brief notice of the recent Annual Meeting, or Conference, of the Methodist Episcopal Mission, held in Foochow, November 10th and 22nd, 1870. The Conference comprised four Missionaries from the M. E. Church, U. S. A., and about sixty native Assistants, or Preachers. The evangelistic operations, represented in the Conference, extend over an area of about 20,000 sq. miles, containing a population that may be roughly estimated at six millions. The area of these operations is annually increasing, and it is expected that, within a few years from this time, the western portions of the Fookien province, which contain a large population, will be overspread by Mission stations and circuits. In some portions of the territory already occupied, the Methodist Episcopal Mission is the only organized Protestant evangelizing agency at work, while, in other portions, it operates in harmony with the very efficient Missions of the American Board, and of the Church of England.

At the Annual Meeting, or Conference, to which I now refer, the Native Assistants are brought together for instruction, consultation, and the transaction of business connected with the Native Churches under the care of the Mission. These Native Assistants are classified according to their literary attainments, and a graduated course of study is assigned to each class on which studies the members of the class are examined quarterly, and, also, at the Annual Meeting. Formerly these examinations were conducted by the Mis-

sionaries, but at the recent Meeting the examinations, in nearly every instance, were conducted by the ordained Assistants connected with the Mission. The prescribed course of study is mainly Biblical; comprising an examination, more or less critical, of the Sacred Text; a statement of the doctrines of the Bible, with their appropriate proof-texts; an elucidation of the manners, customs, &c., &c. of the times referred to; together with the study of all published commentaries and other helps to a better understanding of the Sacred Scriptures. It also includes Biblical Chronology, the principles of Church Discipline or Government, Wesley's Sermons, Christianity and Confucianism contrasted, writing of essays and sermons on Christian doctrines, Elementary Astronomy, &c., &c.

The examinations at the late Meeting occupied the forenoon and afternoon of each day (except Sunday) from the 11th to the 17th November, inclusive; the remaining days (except Sunday) were appropriated to the Sessions of the Conference for the transaction of business. The evenings, and the two Sundays, were devoted to Anniversary exercises, Sermons, and other Public services. The Anniversary exercises included Meetings in behalf of the Missionary and Bible Societies; also a meeting to discuss the Opium question and one on Self-support. At these meetings all the speeches, sixteen in number, were made by the Native Assistants. Two sermons were delivered by Missionaries, and six by the Assistants. The most interesting exercise, connected with the examinations, was the examination in Astronomy, conducted by the Rev. Nathan Sites. The Magic Lantern, and the Astronomical Apparatus at his command, enabled Mr. Sites to illustrate

and explain the principles of this sublime science so satisfactorily that his Native hearers were quite delighted; and some of them frankly declared that the information then obtained had, in their minds at least, given the death-blow to the redoubtable old dragon which, according to Chinese belief, has acted such a conspicuous part in Lunar and Solar eclipses. The Native Preacher, Rev. Li Yu-mi, who assisted Mr. Sites in conducting the examination, had constructed a most ingeniously contrived Planetarium to illustrate the motion and orbits of the Planets; and its exhibition seemed to afford great satisfaction to the audience, suggesting, as it probably did, that the Chinese themselves might soon be able to explain those wonderful phenomena, connected with the heavenly bodies, which have so long confounded and alarmed them. On the evening of the last day of the Meeting, the Rev. Justus Doolittle, at the unanimous request of the Native Preachers, very kindly gave an exhibition with his Magic Lantern, showing a great variety of pictures illustrating Zoology, Ornithology, Astronomy, and also Bible Subjects and Scenes.

The subject of self-support, as connected with the Native Christian Churches, received the earnest attention of the Meeting. Two admirable addresses on the subject were delivered by two of the Native Preachers; and some important Regulations were adopted with regard to it. These Regulations provide.—

1st. That, hereafter, the Native Church shall be associated with the Missionary Society in paying the salaries of all the Native Preachers connected with the Mission.

2nd. That the Native Church pledges itself to pay a *specified portion* of the salary of each Native Preacher.

3rd. That the portion [of the salary of each Native Preacher paid by the Native church, shall *annually increase*, while the portion drawn from the Missionary Society shall *annually decrease*.

I subjoin some of the statistics of the work under the care of the Mission, as reported at the Meeting.

Missionaries (one of them in the U. S. A.)	...	5
Missionary Ladies, (four of them in the U. S. A.)	...	5
Native Agents, during the past year,	...	81
Adults baptized during the past year,	...	402
Children, " " " "	...	82
Total, " " " "	...	484
Members in full connection,	...	931
Probationers, or Inquiries,	...	969
Baptized Children, ...	...	239
Total, Members, Inquirers, &c. &c.	...	2,139
Money for self-support,	...	\$556.50

FOOCHOW, Dec. 9, 1870.

CHINESE MYTHOLOGY.

BY SINENSIS.

No. 2.

"The doctrine of a succession of worlds," says Faber, "more or less systematically and explicitly maintained, may almost be considered as the key to ancient mythology." *Orig. Pag. Idol. Vol. I Ch. 2.* In the same chapter that author also gives the statements of this doctrine by the Hindoos, Egyptians, Iranians, Burmese, Cingalese, Goths, Greeks and Romans, Druids, Mexicans &c., all of whom hold the doctrine of an endless succession of worlds. It is necessary to remark before proceeding further, that in investigating the writings of any heathen people, we must lay aside many of our preconceived notions. For example:—

1. Although we think it absurd to say that the world is an animated being, yet, all the heathen from the earliest ages have, without exception, believed this to be the case. 2. Their use of the words "material" and "immaterial," is wholly different from our's; for, many things which we call material, they regard as immaterial and spiritual e. gr. the subtle ether. And not only so, but they consider the *same* thing as being both material and immaterial in different relations. 3. No heathen nation in the world, has ever conceived the notion of the existence of pure spirit apart from matter. *That* is a matter of Revelation, as Locke states, and therefore the knowledge of Angels or Spirits which we enjoy, is derived

from the Word of God, and cannot be found in any heathen classic. 4. All the gods of the entire heathen world, from the highest to the lowest, are material beings, formed from the subtle ether which emanates from Chaos. "It is the custom with a great many," says Dr. Mosheim, "to believe the ancients to have attached the same idea to words that we do at this day, and to take for granted that the old philosophers followed the same laws and principles in their reasoning as ourselves; hence they altogether remodel these philosophers, and present them before us, not as they really were, but such as they would have been, had they been educated in our schools. *Cud. Intell. Syst. Vol. I p. 53 note.*"

1. The chief Demon-god in each heathen system, forms the world from the eternally existing Matter, which is his body; and when formed, he preserves it in existence, until at length the destroying power reduces it to its original Chaos, sometimes by a Deluge of water, and sometimes by a Deluge of fire. "Every thing is then absorbed into the unity of the Great Father" who is One (or Monad), or animated Chaos, and who "floats in a wonderful Egg, or in the Calix of the Lotus" &c. "To destroy, however, is but to create afresh: for destruction affects *form* alone; it reaches not to *substance*.... out of the chaotic materials of the prior world, another world is fashioned.... and as it was preceded by a world, so in due time it is likewise succeeded by one. This alternate destruction and reproduction, is thought to be repeated again and again; so that in the lapse of countless ages, an enormous number of successive worlds is believed to have existed." *Orig. &c. Vol. I p. 112.* The statement of this doctrine as held by the Stoics is as follows; "After an interval, says Seneca, in which the Deity (i. e. the "Mind" Jupiter inherent in Chaos) will be intent upon his own conceptions, the world will be entirely renewed; every animal will be reproduced, and a race of men free from guilt, and born under happier stars, will repopulate the earth. *Degeneracy*

and corruption will, however, again creep into the world; for it is only when the human race is young, that innocence remains upon the earth. The grand course of things from the birth to the destruction of the world, which, according to the Stoics, is to be repeated with *endless succession*, is accomplished within a certain period. This period, or fated round of nature, is probably what the ancients meant by *the Great Year.*" *Euf. Hist. Philos. Vol. I p. 341.* From this statement we see; 1. That the Stoics held the doctrine of an endless succession of worlds. 2. That the destruction of each world takes place in consequence of the "degeneracy and corruption" of mankind; and 3. That each Kalpa is designated a "Great Year" of the world.

2. The doctrine of the endless succession of worlds is frequently alluded to in the Chinese classics. It is taught distinctly in the *Yih-king*; e. gr. "When the Sun comes to the meridian he declines; when the Moon is full, she wanes; Heaven and Earth (in like manner) are alternately full and empty (i. e. opened out, and Chaotic), and the seasons decrease and increase (again); how much more men and Demon-gods!" *Sec. II p. 40.* The formation of each world is attributed to the chief Demon-god "*K'een*" or Heaven, who is the good principle or Light; and this is always called the "opening out" of the world, and is compared to the opening of a door, in allusion to the Ark, the allegorical Great Mother, who generates all things; while the destruction of each world when all things returns to Chaos or the *Ovum Mundi*, is attributed to *K'wán* or the Earth, who is the evil principle or Darkness; and this return into Chaos is compared to the shutting of a door; e. gr. "Hence, shutting the door is expressive of *K'wán*, and opening the door is expressive of *K'een*. Each shutting and opening is a revolution (of the world); and the everlasting succession (of these revolutions of Heaven and Earth) is called endless perpetuation;" &c. *Ibid. Sec. III ch. 10.*

The paraphrase on this passage compares each "opening and shutting" to a year, and designates each "a revolution of nature." It also represents these revolutions as going on endlessly. See *Theol. of the Chinese* p. 133-4. In the *Pó* Diagram all things are represented as coming to an end in consequence of the depravity of mankind; the "mean man" gaining the ascendancy, and the "Prince" or *Kéen*, the "Mind" who generates all things retiring like the "*Mens*" Jupiter, into quiescence. At the *Füh* Diagram, however, this "Mind" returns and generates a new world from the materials of the old. "The world says *Scene* a, being melted, and having reentered into the bosom of Jupiter (i. e. animated Chaos) this god continues for some time totally concentrated in himself, and remains concealed, as it were, wholly immersed in the contemplation of his own ideas. Afterwards we see a new world spring from him, perfect in all its parts, &c." *Orig. &c. Vol. I. p. 139.*

3. "*Choo-foo-tsze* being asked; From the opening and spreading out (of the world) from Chaos to the present time is not 10,000 years; how was it before that time? He replied, before that there was another (opening out) similar to the present one. Being asked whether Heaven and Earth are capable of being annihilated; he replied, no; but it is my opinion that when men completely depart from correct principles, then the whole world will become Chaos and men and things cease to exist, and then there will be a new commencement." "What *Woo Fung* says about a great termination (of all things) in a general convulsion (of nature), the sea removing out of its place, the hills sinking down, and the rivers overflowing; men and things utterly destroyed, and the ancient traces all effaced, refers to the destruction of the world by Deluge. The shells of the sea snail and pearl oyster have been seen on high hills and on stones; these stones formed (portions of) the soil of the former world." &c. *Choo-tsze's Works* Ch. 49. T. T. 5, 6. "A day has a day's revolution; a month has a month's revolution; a year

has a year's revolution; Heaven and Earth's commencements and terminations are the *Great Revolutions, &c.*" "*Sham-pih-wán* says, each complete Great Revolution resembles a year." "*Sing-le-ta-tseuen, Ch. VIII. p. 13.*" "The phrase (in the Classics) 'Heaven and Earth will not forgive,' means that all things are devoted to destruction;" i. e. are about to return to Chaos. *Choo-tsze* Ch. 49. T. T. 5. It is when all things have been thus destroyed, and when the time arrives for the formation of a new world, that "Mind," or the soul of the world, like the "*Mens*" Jupiter, comes forth from his chaotic egg to perform the task; e. gr. "When the myriad of things have been generated, and are flourishing, Heaven and Earth do not exert their Mind; but when all things have decayed, and require to be again generated, then Heaven and Earth exert their Mind" *Ibid.*, 23.

4. The "Mirror of History" says, "The title 'the three Emperors' must not be discarded, and we must designate them 'Imperial Heaven, Imperial Earth, and Imperial Man.' For when Chaos was opened out, Heaven first came into existence, and then Earth, and when Heaven and Earth existed then their Air transformed, and Man was generated. The *King-she* divides the *Yuen* (Kalpa) into *Hwuy*, and hence it is said that Heaven opened out in the *Tsye*; Earth in the *Chaou*; and that Man was generated in the *Yin* (*Hwuy*). The inferior creation also appeared in the *Yins*. Hence arises the title of 'the three Emperors?'" "*Tae-keih* generated the Two E; the Two E generated the Four Simulacra; and the Four Simulacra changed and transformed, and produced the myriad of things. It is also handed down from antiquity, that the first to appear in the world was *Pwan-hoo* who is also called *Chaos*." *Vol. I. p. 1, 2.* The following is the Diagram used to illustrate the succession of worlds.



"At the *Scōh-hwuy* things cease; and then, no more men or things come into existence." *Sing-le-ta-tseuen* Sec. 8.

5. "*Hou-ying-chue* says, The greatness of Heaven and Earth consists in the immaterial, yet substantial *Yin* and *Yang* (Darkness and Light) which have neither beginning nor end. Speaking generally, these are sometimes Chaotic, and sometimes opened out. Before the time of *Fuh-he*, I know not how many chaoses and openings out there were. The designations 'Chaos' and 'opening out,' refer to the obstruction or the non-obstruction of the revolutions of the *T'ae* and *Pe* diagrams (of the *Yih-king*,) and whether their Air (primary Matter) is free or impeded. When there is no obstruction, then Heaven being subtle (Air) floats aloft, and Earth because coagulated (Air) fills up the lower part, and men and things are generated in abundance in their midst; moreover, illustrious princes and virtuous ministers bear rule in succession, and thus the Human Extreme is established. The commencement of Heaven and Earth is thus; must they not then again return to Chaos? The revolutions of the *Yin* and *Yang* cannot go on for ever, and the *Yin* and *Yang* Air, cannot always pervade (unobstructedly.) From the beginning to the end, whether (the period be one of) innumerable years, or of several myriads of years, there occurs a time when obstruction takes place, and free action is impeded to the utmost degree. Then

Heaven's light (Air) which floated aloft, becomes coarse and sinks down; the coagulated Earth which filled up (below) is rent asunder and melts away; and the multitude of generated men and things all terminate and are destroyed. The formerly opened out Heaven and Earth, at this period, return to Chaos. Heaven and Earth are not totally destroyed at each period of Chaos, because the original Air still exists; and, because this original Air dies not, therefore the obstructed *Yin* and *Yang* are again set free, and their impeded (action) gives way to motion. Whether it be after hundreds of years, or thousands of years, (the time arrives when) Heaven's descended and coarse (Air) again becomes subtle and floats aloft; Earth's rending asunder and destruction, is again exchanged for congealing and filling up; the destruction of men and things gives place to generating without limit, and the *Yin-yang* revolving Air is set free and pervades (all things.) Thus the previous Chaos is exchanged for a new opening out (of the world.) But, from the opening out, of Heaven and Earth to Chaos is a gradual (decline), and from Chaos to their again opening out, is also a gradual (process.) At the beginning of Heaven and Earth, there must always be an intelligent divine Sage to act as King in succession to Heaven, and thus the Human Extreme is again established. *Fuh-he* appears at the commencement of each world." *Sing-le &c.* Sec. 26. p. 12 &c.

6. "When Chaos was undivided, the *Yin-yang* Air was chaotic and dark; and when it divided, it sent forth an all-pervading and brilliant light, and the Two *E*. (of the *Yih-king*) were established. *Shao-k'han-tsieh* considers 129,600 years to be a *Yuen* (Kalpa); then before this period, there was another great opening and shutting (of the world); and before that again it was also thus. Hence motion and rest have no end, and the *Yin-yang* have no beginning," &c. *Ibid.* p. 9.

7. "*Woo-she* says, a *Yuen* (Kalpa) consists of 129,600 years. This period is divided into 12 *Hwuy*; each *Hwuy*

consists of 10,800 years. When the revolutions of Heaven and Earth reach the middle of the *Scōh Hwuy*, all things are closed (i. e. generation ceases), and men and all things in the midst of Heaven and Earth cease to exist. In 5400 years more the *Scōh Hwuy* ends. The 5400th year from the commencement of the *Hae Hwuy* is the middle of that *Hwuy*, and then Earth's coagulated heavy and coarse (Air) is dissolved, and Heaven's light and subtle (Air) becomes chaotic and one; hence this is called Chaos. This Chaos of the subtle and coarse (Air) by degrees becomes more confused, and in 5400 years more, the *Hae Hwuy* ends. This period of impenetrable darkness is the termination of Heaven and Earth. From this termination another *Yuen* (Kalpa) begins, and a new commencement is made. At the commencement of the *Tsyē Hwuy* Chaos still exists, and this Chaos is what is called (in the classics) 'the Great Commencement,' 'the beginning of a *Yuen*' (Kalpa), and 'The Supreme One (太一);' that is to say, the subtle and coarse Air are chaotic and one, not being yet divided. From this period light dawns by degrees and after another 5400 years, in the middle of the *Tsyē Hwuy*, the light and subtle Air ascends, and the Sun, Moon, Planets and Stars exist; these are the Four Simulacra (of the *Yih-king*), and are all Heaven. In 5400 years more, the *Tsyē Hwuy* ends, and hence it is said that Heaven opens out in the *Tsyē (Hwuy)*. The coarse Air, although accumulated in the midst (of Heaven) has not yet coagulated and become hard, so that the Earth is not yet in existence. In 5400 years more, the middle of the *Chaou Hwuy*, the heavy and coarse Air coagulates, begins to harden, and forms clay and stones; the warm and moist Air becomes water and flows forth without coagulating; and the burning hot Air becomes fire, bright and unquenchable. Water, Fire, Clay, and Stones, these four complete the bodily form, and all compose the Earth. Hence it is said that Earth is spread out in the *Chaou (Hwuy)*. In 5400 years more the *Chaou Hwuy* ends.

Also, from the beginning to the middle of the *Yin Hwuy* is 5400 years; and at that time Man and all things begin to be generated in the midst of the pair (i. e. Heaven and Earth); hence it is said that Man is generated in the *Yin (Hwuy)*. *Single &c., Sec. 8 p. 12 &c.*

8. "*Tsing-héen* says, In the *King-she* the calculations of the termination and commencement of each *Yuen* (Kalpa) embrace the terminations, and commencements of Heaven and Earth, and the generating and cessation of men and things. It explains what the ancient Sages omitted to explain. Heaven opens out in the *Tsyē (Hwuy)*; Earth in the *Chaou*, and Man is generated in the *Yin*. These are the periods during which Heaven and Earth begin to be separated, and men and things begin to be generated. Heaven and Earth are eternal, but the periods of Heaven and Earth have their terminations; this is the doctrine of the commencements and terminations of Heaven and Earth. *Shan-tsyē* uses the 12 diagrams to illustrate fully the periods of Heaven and Earth. The *T'ae* (diagram of *Yih-king*) is the opening out of things; the beginning of the separation of Heaven and Earth. The *Pō* (diagram) is the closing up of all things, and the final termination of Heaven and Earth. Speaking generally, every thing in the midst of Heaven and Earth must commence and terminate in a perpetual circle. Is it not the case, that those of moderate intelligence, and even the stupid can understand this? *Shaou-pih-wān* has exhausted this subject. *Ibid.*

From the above statements we see that the Confucianists, like all the other heathen throughout the world, hold an endless succession of worlds; that, like the Stoics and all others, they hold that each return to Chaos by Deluge is caused by the degeneracy of mankind; and they also designate each Kalpa a "Great Revolution," and compare it to "a year." In common with the whole Pagan world, they hold that all these worlds are *precisely similar*; each world commences with the same beings, viz, "Imperial Heaven, Imperial Earth,

and Imperial Man," the three Great Powers of nature. Like the rest of the heathen world, they consider Matter to be eternal; and like Anaximenes and other Philosophers of the West, they make Air the primary matter. It is evident that the First Man, *Pwan-koo* (Adam) or *Fuhhe* (Noah) is, by his endless appearances *deified*, and clothed in one of the chief attributes of Jehovah. Chaos, in numbers, as in the system of Pythagoras, is designated "one" (*Monad*), because the subtle and coarse Air is when in that state mixed up in *one undivided mass*. And, as this Chaos is the "Great Origin," or "Great Extreme" from which every thing in the universe is generated (including gods and men), it is designated, "The Supreme one" (太一, *Monad*), and "The Great Commencement." Lastly, Man appears in the *Yin Hwuy*, and the Deluge occurs exactly in the tenth period from this (*Hae Hwuy*) as Scripture states. That the Deluge is *always* confounded with Chaos, see. *Fab. Vol. II. p. 19.*

NOTES OF A BIBLE TOUR IN SHAN-SI.

BY J. DUDGEON, ESQ. M. D.

The yellow river lies 3 li to the south of this city (*Yuen-kh'u-hsien*.) The river here is 1 li broad in the 6th month, $\frac{1}{4}$ of a li in March. The current flows at the rate 50 paces per minute at a bend of the river. The depth is very uncertain and variable. Probably 3 or 4 feet. The people there have a saying, *Hwang-hö-muh-yew-ti-rh*, 黃河無底 *Hai-muh-yew-pi-rh* 海無邊. The yellow river has no bottom; the sea has no border.

It is navigable from the 3rd to the 10th month. At this point there are some 10 ferry boats. The rebels had been at this place in the 3rd year, 8th month, 12th day of Hien-fung's reign, and the place had suffered badly in consequence. The Tao-tai, Che-hsien, Tu-si and Laqu-shi lost their lives. The place was visit-

ed again by rebel hordes from Ho-nan in the 6th year, 12th month, 6th day of the present reign. Fearing murder, the Chi-hsien 知縣 and Tu-si 都司 set fire to themselves in the *Sze-shen-miao* 四神廟 temple.

At this place a man accosted them demanding to be cured of opium. He said, "You bring Bibles, why not bring anti-opium pills. You brought us opium, and now you bring us holy books and refuse to cure us—why not bring us anti-opium books or pills and not these "glad tidings books" that contain nothing about opium." This is the universal cry in the interior. What inconsistency and cold heartedness they think, first to import opium and then when they are its slaves, come and mock them by preaching, selling or distributing good books, and make no effort to relieve them of a habit, that is ruining body and reducing them to beggary!

Wän-hsi-hsien 聞喜縣 contains about 4000 families. Soda (*Kien*) is found here, 20 li from the city. Opium-smokers are said to be 70 per cent, and opium shops exist in great numbers on the streets and on the grand road. Of all the places visited, this one seemed most addicted to the pipe. The smokers were most anxious to obtain medicine to cure them of the pernicious habit. Messrs. Williamson and Lees had been here in 1866. There are a few Mohammedan camel-inns. The camels are employed in exporting goods.

Hsia-hsien 夏縣 has 2000 families, with a silk hong producing about 500 catties per annum.

The raw silk sells at 4. 2. 0. per catty. The word for book *Shu* 書 is here pronounced *Fu*.

Mau-ching-tu 茅津渡 is the principal crossing of the Yellow river from Shan-si to Ho-nan. The breadth of the river here is about 90 *Pu* 步 in winter, and one *li* in summer. There are here 9 ferry boats. Mr. W. saw 6 boats in the river, 4 of which were laden with limestone for Tung-kwan 潼關.

P'ing-lu-hsien 平陸縣 has 200 families; 40 per cent of the people are given to opium smoking. There were here 11 convicts from Peking; one had been exiled for 13 years, a Mahomedan called *Li-rh-pa*, 李二把 who, as a pawnbroker had made a fortune of 50,000 Tls. and had just bought his liberty. He intended starting for Peking in April, a month after the visit of our party. Another had commenced with about 700 large cash and had gained over 1000 Tls. He is known as the "little pawnbroker," which means that for 1 teau's value, 1 large cash is paid daily, i. e. at the rate of 60 per cent, and if not redeemed at the end of the month, the goods are sold. Convicts only can carry on such a business in this manner. According to the law it ought not to exceed 3 Tls. per mensem but is much oftener less.

In Jui-ch'eng-hsien 芮城縣 in the district of Hai-chow 解州 the party went to the Ya-mun and found the mandarin beating a man who was bleeding copiously. They went again in the evening but the official refused to see either colporteur or books. Next day he sent two messengers ordering him to leave. The day was Sunday the 19th March. He was informed that if he sent mules, the party would leave, but to this no answer was made. It was market day, and the people visited the foreigner in great numbers. At first he gave away the books but the demand became so great that he was obliged to have recourse to selling. The mandarin threatened to beat, with 100 blows, any one who bought the books, but many bought copies and hiding them in their breasts, departed. Several officers called upon him but kept secret the object of their visit and by whom sent.

Ultimately things turned so round that the mandarin himself started to come, but his servant called him back. He was apparently afraid of some secret mischief brewing. He is an honest official and cannot be bribed. He is very strict with the people. The viceroy is even afraid of him—such is the force of his truth and honesty. He goes out and in among the people like one of themselves and settles

their disputes and differences. He never rides in a chair, his servants are his relatives—he pays them himself and Ya-mun expenses for 5 or 6 people, amount only to about 25 cents per diem. While there a man and his wife arrived purporting to be possessed of a spirit, which was able to cure all manner of diseases. This official tied their thumbs together, set fire to them with the moxa and gave them *Chu-sha* (cinnabar) 硃砂 to drink. When the evil spirit had been driven out of the couple, he drove them out of the city. One hundred such mandarins would soon revolutionize the corrupt practices of China. The mandarin of Jui-ch'eng-hsien is a model official and deserves to have his merits thus publicly proclaimed.

Hai-chow 解州 is a place of 4000 families with the almost invariable number of 4 out of ten opium smokers. It is distant about 2 li from the salt lake. There is a magnificent temple in the West suburb to the honor of Kwan-fu-tse, the god of war, who was born in this locality, and the fire crackers, to-day, 22nd July, 6th month, 24th day, in the city of Peking remind of his birth day. It was in course of being repaired when Mr. W. visited it on the 22nd of March last. Mr. W. paid it a visit and entering into conversation with the head workman, he told them that "Kwan-lau-ye 關老爺 was not a spirit to be worshiped," but he replied, "he had fought battles and kept away the rebels &c., and was therefore worthy of such honour." In the evening a runner from the Yamun went to enquire about the foreigner and ordered him to leave immediately. Mr. W. went to pay a call upon the Chi-hsien, but found him not at home. He met a Peking man in the Yamun who supported them, and upon seeing this, the other officials apologised by saying that the order to leave had been served upon him by mistake.

This Peking man paid a visit in the evening, and reported the death of the Chinaman who had been shot by a servant of the French Chargé d'Affaires during his visit last summer with other gentlemen to Mongolia and Shansi. This man was reported by the priests as having re-

covered, but the Chinese assert positively that he did die, and the officials have failed in bringing to justice this French servant who committed the murder.

This same Pekinese told Mr. W. that he had a friend a native of Shansi, at Ch'li-wo-hsien 曲沃縣 who had made a small steamboat which could go a little way in a pond of water or in the kang, (the kitchen earthenware vessel for containing water).

Yün-ch'eng 運城 has a population estimated at 6000 families; one-third of them are exiles from Shensi who escaped with their lives during the period of the rebels. In a village 3 or 4 li South of this, were traces of foreigners having been there (Messrs. Lees and Williamson.) The salt lake here is 10 li broad and 60 li long, situated at the foot of the hills. The salt is in beds and nearly a foot thick. It is cut out and allowed to dry in the sun in the summer.

At Chi-shan-hsien 稷山縣 found that Mr. Paul Bagley of the American Conference had been here a few years ago. This place is famous for the number of its old clothes' shops.

In P'ing-yang-fu 平陽府 he met a teacher in the military Yamun, who had formerly been captured by the rebels and had remained in their service for a few years under Li-k'ai-fang, 李開方, the Kwan-si 廣西 Taiping, one of the chief of the rebels. This man affirmed that he was a Protestant Christian. He read his Bible, sang hymns and prayed daily. This, he said, was the custom followed by the Taipings. It is interesting to note this additional evidence of the sincerity and Christianity of the rebels.

Since the above was written, Baron Richthofen has passed hastily through the same district of country and communicated the results of his researches into the mineral wealth of Shansi, to the Shanghai paper. In no sense, however, can he be termed, as is done in "*Evening Courier*," (in Italics too,) the discoverer of the coal and iron mines of this province. These mines have long been known to foreigners in the North of China and referred to by travellers, such as Mr. A. Williamson and

also in a paper to the *Recorder* similar to this one (Vol. II p. 134), the results also of Mr. Wellman's tours. He has within the last three years, made three journeys, embracing a period of eighteen months.

Neither is it true, as asserted in the same quarter that Baron Richthofen has been the first or only one to light upon the last remedy for, and to press its importance in, opium-smoking, as a reference to the opium papers in this Journal will testify.

PEKING, 22nd July, 1870.

THE STUDY AND VALUE OF CHINESE BOTANICAL WORKS.

BY E. BRETSCHNEIDER, ESQ., M. D.

(Continued.)

Notwithstanding the works of some French savants, which treat of Chinese dyeing materials, (Rondot, le vert de Chine 1858—Stan. Julien and Champion, industries de l'empire Chinois 1869) we know very little about the plants, which yield these dye stuffs and are for the most part obliged to quote the vague statements of Loureiro from the last century.

Chinese joiners and carpenters use extensively some very precious woods, obtained in China, namely the 楠木 *Nan-mu*, the

紫檀 *Tsu-t'an*, the 花梨木 *Hua-li-mu*, the 紅木 *Hung-mu*. All these trees are described in the Pên-ts'ao as growing in southern China, the *Hung-mu* (red wood) in Yün-nan, the *Nan-mu* in Ssü-chuan, the *Hua-li-mu* in Hainan, Annam. Father Cibot asserts (Grosier, la Chine II 279) that the tree, which furnishes the valuable *Nan-mu* is a kind of cedar. But the Pên-ts'ao says, that the leaves resemble an ox-ear. As regards the *Hua-li-mu*, Mr. Taintor in his interesting accounts on Hainan (Geographical sketch of Hainan, v. Reports on trade in China 1867) says: "several varieties of ornamental woods are obtained, the most abundant of which is the *Hua-li*, a hard, dark, handsomely veined wood, which is very neatly turned into a variety of articles." Nevertheless all these trees still do not seem to have been determined by botanists. Perhaps specimens of them may be included in the herbariums of our botanists, but they are not identified with the Chinese names.

It occurs often, that the Chinese in different provinces, have different names for the same plant, which must occasion much confusion. But in such a case the Chinese always know besides the local name of the plant, the book name also of the Pên-ts'ao, which they consider as the foundation of botanical knowledge. Li-shi-chên gives also a great number of synonyms of each plant. Accord-

ing to the Pên-ts'ao 大麻 *Ta-ma* (great Hemp) relates to *Cannabis sativa*. But in Peking the people understand by this name the *Ricinus communis*,* and call the common Hemp 小麻 *Siao-ma* (little Hemp).

According to Bridgman's *Chrestomathy*, *Carica papaya*, the *Papaw* tree in Canton is called 木瓜 *Mu-kua* (wood melon). But in Chinese books, as also in Peking, *Mu-kua* denotes *Cydonia*, the Quince.

For the first knowledge of Chinese botany and Chinese plants we are indebted to the Jesuits, who since the end of the 16th century have preached the gospel in China and studied the country and its people. As a curiosity I will cite a small botanical pamphlet (75 pages) by *Pater Boym*, who lived in China from 1643-59. This first essay in this department, issued in the year 1656 in Vienna, bears the pretentious name "*Flora Sinensis*" but contains only the description of 20 interesting plants and some animals, and 23 drawings with the Chinese characters. This little work is very rare. All accounts of Chinese natural science furnished by the Jesuits (namely by Father *Martini* in his *Atlas Sinensis* 1656) are collected in the admirable work of *Du Halde*, *Description de la Chine* 1735. There have been described a good number of Chinese plants, animals, minerals, for the most part translations from Chinese books, and also represented by rude drawings.

A work similar to that, drawn up by *Du Halde*, was published in the year 1818 by *Grosier*, *Description générale de la Chine* in 7 volumes. Nearly 3 volumes treat of Chinese natural science, 660 pages of them are dedicated to botany. The work of *Grosier* is most entirely compiled from the *Mémoires* concernant les Chinois and other works of the Jesuits, in the 18th century. Although the articles on Chinese plants of the ancient Jesuits bear no scientific character, they however contain many interesting accounts, either drawn from Chinese authors or the results of their own observation. *Grosier* has also included in his book a great part of *Loureiro's Flora Cochinchinensis* published in the year 1790. *Loureiro*, a Portuguese missionary, described therein a great number of plants of Cochinchina and Southern China, joining to

* The book name for *Ricinus*, known only in apothecary shops, is 蓖麻 *Pi-ma* (P. XVIIa. 32.) The

Pên-tsao ranges it under the poisonous plants. It is known, that the seeds, if eaten are very poisonous, whilst the oil extracted from them, the common Castor-oil, is an innoxious purgative. Some assert, that the Chinese use the Castor-oil as food, which loses its purgative action by boiling. As far as I know, the Castor-oil in Peking is only used for lamps and in medical practice. Li-shi-chên explains the character *Pi* by the resemblance of the seeds with an insect he calls

牛虱 (oxen louse.) It cannot be decided from Chinese books whether or not the *Ricinus* is indigenous in China. The plant is not mentioned before the Tang 618-907. The character *Pi* is not found in the ancient dictionary *Shuo-wên* (100 A. D.).

the scientific names also the local Chinese names. Notwithstanding the great renown of this work, being the only *Flora* of these countries extant, *Loureiro*, seems not to have possessed the necessary botanical knowledge, for it has been often impossible for modern botanists, to recognize from *Loureiro's* description the plants determined by him.

Eighteen years after *Grosier's* work appeared, another compilation on China was published (1836) by 5 authors, *Murray*, *Crawford*, *Gordon*, *Wallace*, *Burnet*, an historical and descriptive account on China. *Burnet* has elaborated the division which treats on natural science, and collected all notes of travellers and naturalists concerning Chinese plants, animals, &c. Therein are also to be found "*Fragments towards a Flora of China.*"

The first, who studied Chinese books on natural history provided with the necessary knowledge of natural science was the well-known sinologue *Dr. S. W. Williams*. Besides several articles on this subject, published in the *Chinese Repository*, *Dr. Williams* first tried to identify Chinese names of plants, animals and minerals, found in the Pên-ts'ao Kang-mu, with the European scientific names. The three chapters in *Bridgman's Chrestomathy* 1841, treating of Botany, Zoology and Mineralogy are compiled by this remarkable Sinologue.

In the year 1850, *Dr. Tatarinov*, physician of the Russian ecclesiastical mission in Peking, during 10 years, published a list of drugs obtained from the Chinese apothecary shops. *Tatarinov*, well versed in Chinese, gathered all medicinal plants growing near Peking.* The plants and drugs collected by him have been examined and determined by special savants in St. Petersburg. This is the origin of *Tatarinov's Catalogus medicamentorum sinensium*. Some of the drugs are described in *Gauger's Repertorium f. Pharmacie w. pract. Chemie in Russland* 1848. Heft. 12. But a good number of the drugs in the catalogus has not been recognized; and *Tatarinov* has often made use of *Loureiro's* diagnosis, which merits but little confidence.

A small, but very valuable work, which treats also of Chinese drugs and medicinal plants, is *Dr. Hanbury's Notes on Chinese Materia medica* 1862.

I would finally mention a small treatise, which likewise endeavours to identify Chinese names of plants with the scientific ones, entitled: *Noms indigènes d'un choix de plantes du Japon et de la Chine* par *J. Hoffmann* et *H. Schultes* 1833. *M. Hoffmann* says in the preface, that the *Floras* of Japan and China are very similar, and concludes, that, if the same characters to designate

* The hills to the West of Peking are famed for their riches in medicinal herbs, but very many Chinese drugs come also from *Ssu-ch'uan*, *Hunan*, and *Shantung*.

plants, occur in Japanese and Chinese books, they denote the same plant. But it is an error. It is true, the Japanese have borrowed from the Chinese their characters for names of plants. These Chinese characters in Japanese botanical writings have the same value as the Latin names of our botanists. There is generally also concordance between Japanese and Chinese plants. But as there are many Japanese plants, which do not occur in China, the Chinese characters for plants are often used in Japan to designate similar plants, or quite different ones. For instance: The character 楓 *Fēng* denotes

in China the *Liquidambar formosana*, according to Hoffmann and Sch. it is *Acer trifidum*.

榲桲 *Wēn-po* is in China a species of *Crataegus*, much used in sweet-meats in Peking, but *Cydonia vulgaris* in Japan.

The 山楂 *Shan-cha*, *Crataegus pinnatifida* in China H. and Sch. refer to *C. cuneata*.

The name 海石榴 *Hai-shi-liu* for *Camellia japonica*, according to H. and Sch., is, I think, not used in China. The Chinese call the *Camellia* like the Tea shrub *Cha-shu* (茶), and they recognized earlier than our botanists (Bentham and Hooker, genera plant*) that the *Camellia* and the *Thea* relate to the same genus.—H. and Sch. call the *Aesculus turbinata* (the same as *Aesc. chinensis*)

七葉樹 *Ts'i-ye-shu*, (seven leaved tree), but as I have stated above this tree is known in Northern China under the name of *Po-lo-shu*. The name *Ts'i-ye-shu* does not occur in Chinese books. The 紫草

Tsu-ts'ao of Chinese books is the *Tournefortia Arguziana*, the roots are used for dyeing in red, in Northern China. H. and Sch. state that this name refers to *Lithospermum erythrorhizon*.—H. and Sch. in their list of plants enumerate a good number of plants, which grow only in Japan and therefore cannot have Chinese names. It is, I believe, not proved, that *Illicium religiosum*, the sacred plant of the Japanese, occurs in China (Lindley l. c. mentions it only as a Japanese species) and the name 莽草 *Mang-ts'ao*, which H. and Sch. attribute to *Illicium religiosum* seems to denote an entirely different plant in Chinese books. See the drawing in the Ch. W. XXIV.

Morrison in his Dictionary gives often also scientific names of Chinese plants, but generally they are wrongly adduced. Pru-

* *Thea olim a Camellia characteribus fallacibus distincta, nuper limitibus certioribus definita, nempe staminibus interioribus liberis numero petalis aequalibus nec duplo pluribus, nobis potius pro sectione habenda, nam genus in integrum servatum magis naturale videtur.*

dence is therefore necessary in the use of all the above mentioned statements and we cannot "bona fide" adopt the determination of names of Chinese plants by our authors.

The Chinese in their geographical statements generally enumerate plants, beasts and other products of the countries described. These accounts are often very important in enabling us to recognize, what country is meant. Our sinologues, from whom we cannot of course expect a knowledge of natural history, fall often into errors in quoting such wrong determinations of Chinese names of plants.

M. Stan. Julien in his translation of the travels of Wang-yen-te to the Oigours (981-983), *Mélanges de Géographie Asiatique* p. 91, renders the name of a tree 胡桐 *Hu-tung*, which occurs in this narrative, by *Volkameria japonica* and 苦參 *Ku-shēn* by *Colutea arborea*. I do not know from whence M. Stan. Julien has drawn this information. It can hardly be assumed, that *Volkameria japonica* grows in the Mongolian desert. The tree *Hu-tung* is said after rain to exude a kind of gum. It is also described in the *Pên-ts'ao XXXIV* 64, and represented in the Ch. W. XXXV. It is likewise very doubtful whether *Ku-shēn* is *Colutea*. Loureiro calls *Robinia amara* by this name.

Many errors of this kind are also to be found in a work published in the year 1869 by M. Stan. Julien and P. Champion under the name, *Industries de l'Empire Chinois*. But these mistakes are however to be ascribed not to the great sinologue, but only to his collaborator, who made his studies in China. I may be allowed, to point out some of these misstatements. M. Champion informs us, that the *Olive-tree* (*Oliva europaea*) thrives in China (p. 120.) But our olives are not to be found here. The fruit, which bears this name in China is produced from *Canarium pimela* and *C. album*, trees of Southern China. The Chinese name is 橄欖

Kan-lan (P. XXXI^b Ch. W. XXXI.) The 皂莢 *Tsao-kie*, (black pod, on account of the large black pods) is not *Mimosa fera*, as Champion states, but *Gleditchia sinensis*, (P. XXXV^b 4. Ch. W. XXXIII.) The 鹽膚子 *Yen-fu-tzu* is called by Champion, *Nux Gallae tinctoriae* (P. 95). Mr. Champion meant here probably

* But in China the *Olea Fragrans* is much cultivated for its little fragrant blossoms, which appear in autumn. The common name is 桂花 *Kui-hua* (cinnamon-flower.) A good drawing can be found in the Ch. W. XXXIII (嚴桂).

the 五倍子 *Wu-pei-tzu* or Chinese gall-nuts furnished by a shrub, *Rhus semialata*, called *Yen-fu-tsu* by the Chinese (P. XXXII 20. Ch. W. XXXV.) In the same work, there is further described the 地黄 *Ti-huang* (ground yellow) p. 90, a Chinese medicinal plant, used also for dyeing in yellow. Champion calls this plant *Rhemnesia sinensis*. But such a name, I think, does not exist in botanical nomenclature. The same name occurs also in Rondot's work, Notice sur le Vert de Chine 1858. I should say, this is a misprint in Rondot's treatise, which Champion introduced into his own. The *Ti-huang* of the Chinese is the *Rhemnesia sinensis* (*glutinosa*) of our botanist.—The *Vernicia montana* of Champion is probably the *Elaeococca verrucosa* of botanists, the seeds of which yield the poisonous oil called

桐油 *T'ung-yu*. Cf. Blakiston's. Five months on the Yang-tse 1862. M. Champion might have avoided these and other errors, if he had taken the trouble of consulting a generally known and highly useful work, Dr. S. W. Williams's Chinese Commercial Guide 1863, or Dr. Hanbury's *materia medica* and other English works. But M. Champion preferred to take information out of French works, written in the last century, as the *Mémoires* concernant les Chinois, Loureiro's *Flora Cochinchinensis*, &c.

CHINESE ACCOUNTS OF PALMS.

In order to complete my notes on Chinese botanical works and to illustrate my critique of them, I will give some specimens of Chinese descriptions of plants chiefly from the *Pên-ts'ao*, and I shall choose for this purpose the Chinese accounts of Palm trees, a theme I have already treated briefly in the Vol. III of Notes and Queries (*Les Palmiers de la Chine*), but which I intend now to present in a more complete form.

I would observe at the outset, that although Palms of several kinds are indigenous in China and now very popular trees among the Chinese, and of great importance, affording many articles necessary to Chinese life and comfort, Palm trees are not however mentioned in the Chinese Cardinal Classics. Neither in the *Rh-ya* nor in the *Shu-king*, the *Chou-li*, or in the *Shi-king*, which celebrates in song all the renowned plants of the ancient Chinese, can be found any allusion to these splendid trees. The *Materia medica* of Emperor Shen-nung makes no mention of any Palm. This is easily understood. The Chinese classics date from the dawn of Chinese civilization, which developed itself in a temperate climate on the fertile soil between two of the largest rivers of Asia, in the Chinese *Mesopotamia*. It was only at

the time of Emperor *Shi-huang-ti*, 246-209 B. C., that the Chinese dominions spread to the South of the Yang-tse-kiang and the Chinese made the conquest of the Southern provinces Kuang-tung and Kuang-si, where Palms, the typical trees of the tropics, began to appear. There is however a Palm in China, the geographical distribution of which reaches to the North as far as the Yang-tse-kiang. This is the *Chamacrops Fortunei* (*-xeelsa*), and this Palm is mentioned in the *Shan-hui-king* or "Hill and River Classic" (v. s.). It seems therefore to have been known by the Chinese in remote times. The earliest description of Palms by Chinese authors occurs in the *Nan-fang-t'ao-mu-chuang* (4th century), namely of the *Coccoloba*, the *Areca*, the *Caryota* and others, and these descriptions are repeated in all botanical works of later time.

1. 椰子 *Ye tsü*.

(*Coccoloba Palm*, *Cocos-nucifera*.)

(P. XXXI 20. Ch. W. XXXI.)

釋名 *Shi-ming* (Explanation of names).

A synonym for the *Ye-tsü* is 越王頭 *Yüe-wang-tou* (head of the ruler of *Yüe*). According to the *Nan-fang-t'ao-mu-chuang* there is a tradition, that the ruler of 林邑

Lín-yi had a quarrel with the ruler of 越 *Yüe*.^{*} The former sent a man to kill the ruler of *Yüe*. He found him drunk, killed him and hung his head on a tree. The head became metamorphosed into a *Coccoloba*, with two eyes on the shell.† This is the origin of the name *Yüe-wang-tou*. The *Coccoloba* contains a liquid like wine (the *Coccoloba* milk), and as the Southern people called their rulers by the title 爺 *Ye* denoting "master," they changed also the name of the *Coccoloba* into a name of similar sound, written 椰. Another Chinese Synonym

for the *Coccoloba* is 胥餘 *Sü-yü*, a name employed by *Ssu-ma-siang-ju* (2d century) B. C.) in his poem *Sung-lin-fu*. Other authors wrote 胥耶 *Sü-ye*.

集解 *Tsi-kie*. (Description of the tree). Ma-chi (an author of the 10th century) says: The *Ye-tsü* grows in 安南 *An-nan* (Annam). The tree resembles the *Tsung-*

* *Lín-yi* was in ancient times a kingdom in India beyond the Ganges, (v. l.) whilst *Yüe* or *Nan-yüe* corresponded with the modern Tonking and Southern China.

† What is commonly called *Coccoloba* is the hard shelled seed of the *Coccoloba* fruit and bears at the base three unequal depressions.

lū (Chamaerops and other Palms, see below). The seed contains a liquid of inebriating properties. *Su-sung* (a writer of the 11th century) states: 'The Ye-tsū grows in all departments of 嶺南 *Ling-nan*. (Ling-nan, to the South of the Mei-ling mountains, at the time of the Tang dynasty 618-907, comprised the modern provinces of Kuang-tung and Kuang-si). The *Kuang-chi* (Sung dynasty 960-1280) says: 'The tree resembles the Kuang-lang, (Caryota sp. v. i.) has no branches, is several 丈 *Chang* high (a Chang=10 feet),* the leaves are like a bundle at its summit. The fruit 實 are as large as a Melon, hanging down between the foliage. The fruit is surrounded by a coarse rind like horse's hair. Within this rind a very hard nut (殼) is found, of a roundish and somewhat oblong shape. Within the nut there is a white pulp like pork's grease half an inch thick and more, of a taste like walnuts. This pulp envelopes 4-5 合 *Ko* (about half a bottle) of a liquid like milk, of a cooling and inebriating nature. From the shell different domestic utensils can be made. The white pulp yields sugar. The *Kiao-chou-chi* (description of Southern China) states: 'The Ye-tsū resembles the Hui-tsung (Ocean Palm v. i.). The fruit is of the size of a large cup and surrounded by a coarse rind like the Ta-fu-tsū (Areca Catechu). In the interior of the fruit is a potable liquor, which does not inebriate. The tree grows in the province of Yün-nan. *Tsung-shi* (an author of the Sung dynasty, 960-1280) repeats the above statements and adds that from the shell wine cups are made. If wine poured into such a cup, contains poison, it will effervesce or the vessel will burst. Nowadays people varnish the inside of Cocoa-nut cups, but then the cups lose their efficacy. *Li-shi-chên* (the author of the Pên-ts'ao) states: 'The Ye-tsū is the largest of fruits. In planting the Cocoa-nut tree a quantity of salt must be placed near the roots, then the tree will grow high and produce large fruits.

* Mr. Sampson (Notes and Queries III p. 148) quotes a Chinese author, who says, that the Cocoa-nut trees are so high, that men cannot get at the fruit; but they are gathered by the 多羅之人 *To-lo-chi-jen*, who climb the trees for the purpose. Mr. Sampson is inclined to suppose that by the *To-lo-chi* monkeys are meant. It is true, that in some countries (namely in Sumatra) monkeys are dressed to gather Cocoa-nuts, but in this case men are to be understood. At the time of the Yüan dynasty a wild tribe in the modern Kuang-si and Cochin China was called 多

羅蠻 *To-lo-man* (Man=Southern Barbarians) Cf. Pauthier's Marco Polo p. 431.

It attains a circuit of 3-4 fathoms, a height of 50-60 feet. The tree resembles the *Kuang-lang* (Caryota, v. i.) the Pin-lang (Areca Catechu). It is branchless; the leaves are united at the summit, 4-5 feet long, erect, and point to the heavens. They resemble the *Tsung-lū* (v. i.) and the *Feng-wei-tsao* (Cycas, v. i.). In the second month bunches of flowers appear between the leaves, 2-3 feet long and as large as 4-5 斗 *Tou* (a Chinese measure of corn). In the same manner subsequently the fruits are arranged in bunches, hanging down from the tree; the largest are of the size of a Watermelon, 7-8 inches long, 4-5 wide. In the sixth or seventh month they ripen. A coarse rind surrounds the fruit. Within is a roundish nut of a dark colour and of a thick, very hard shell. The nut contains a white pulp like snow, of an agreeable sweet taste, like milk. This pulp encloses an empty space, which is filled up by several *Ko* (v. s.) of a liquid. In boring the fractiferous twig a clear fine liquid like wine flows forth. But afterwards it becomes muddy and spoils. The shell of the nut is bright, striated and veined. By slitting it transversely large domestic vessels can be made, whilst by a lengthwise splitting large and small spoons are produced. The History of the Tang states, that foreigners make wine from the flowers of the Ye-tsū.

These descriptions of the Cocoa-nut given in the Pên-ts'ao are very correct, as everyone will know, who has seen this beautiful and useful Palm. The husk of the fruit yields the fibre, from which the well known *Coir* (derived from the Indian name *Coya* or *Kaira*) is procured, extensively employed in Southern countries in the manufacture of cordage, for matting &c. It is also generally known, that the hard shell is made into various kinds of domestic utensils. Mr. Sampson (l. c. p. 148), states, that in Kiung-chou, the capital city of Hui-nan, great varieties of tea-pots, basins &c., are made from the shells, some simply plain and polished, others more or less highly ornamented with carved figures and of various colours; these are the particular articles of virtue of Kiung-chou-fu. As regards the antipoissonous virtue of these utensils, as mentioned by Chinese authors, this superstition exists also in Ceylon. Mr. Sampson quotes from Yules Cathay II p. 362 the following: "John de Marignoli, early in the fourteenth century, in describing Adam's garden in Ceylon, says of the Nargil (Cocoa-nut): they also make from the shell spoons, which are antidotes to poison.—Li-shi-chên describes also correctly the obtaining of palm-wine from the Cocoa-tree. What is called palm-wine or *Toddy* (this is the

Malayan name, the Indian one is *Sura*) is procured by boring the twigs or by incising the peduncles of the flowers or the unripe Cocoa-fruits. But Toddy can also be made from the sap of other palms, especially the Palmyra palm, (see below). When fermented this palm sap is intoxicating and the best Arrack is distilled from it. By boiling and evaporating it "Jaggery" or sugar is obtained. Some of the Chinese authors seem to confound the Cocoa-nut milk with the palm-wine. As far as I know the milk, an agreeable cooling drink, is not used in the preparation of spirituous beverages.

It is known, that the Cocoa-nut palm is extensively cultivated throughout the tropics of both the old and the new world. Its native country seems to be India and especially Southern India. The Northern limit of its geographical distribution reaches in British India as far as the tropic, but here it grows only on the Western shore, the Eastern shore of British India, and the interior being almost destitute of Cocoa-nut palms. The damp and warm Delta of the Ganges again produces forests of *Cocos nucifera*, but the tree also does not exceed the tropical limit. In India beyond the Ganges the Northern limit of it extends as far as the 25° of latitude (Cf. Hamilton account of Assam (1798) I p. 243.) As regards China it is known from European sources, that the Cocoa-nut grows abundantly in the island *Hai-nan*, namely on the Eastern coast (Cf. Taintor's Geographical Sketch of *Hainan* 1868) and forms an article of export trade. On the opposite coast of the mainland, in the Department of *Lui-chou-fu*, the tree also is found. Mr. Sampson states: (l. c. p. 148): "the most northerly spot in which I have seen it flourishing in this part of the world is on the island of Now-chow latitude 20°50.—The Pên-ts'ao asserts, that it grows also in the province of Yün-nan, and in all the departments of Kuang-si and Kuang-tung. But this seems to be an erroneous statement. The great Geography *Yi-tung-chi* quotes only the following places as producing Cocoa-nuts: *Kiung-chou-fu* (*Hai-nan*)—*Yü-lin-chou* (*Kuang-si*)—*Tai-wan* (*Formosa*).—The *Kuang-si-tung-chi* mentions the Cocoa-nut as a product of *Chên-an-fu* (*Kuang-si*).

The Cocoa-nut is rich in names. Its Sanscrit name is "*narikela*" (meaning juicy, Cf. *Amarakocha*, Vocabulary Sanscrit, tradition per Deslongchamps I. p. 115) and has spread to the Persians, Arabians and Greeks, the Persian and Arabian name being "*nargil*." Kosmas Indicopleustes (6th century) calls it 'Agvillion (Cf. Thévenot, *Relat. d. voyages curieux* 1666 Volume I.) The name

nyor used in the Archipelago (Crawford, *Indian Archipelago* I p. 379.) seems to be also of Sanscrit origin. But the Chinese name "Ye" has nothing in common with Sanscrit, and we must be contented with the etymology given in the Pên-ts'ao.—Marco Polo describes the Cocoa-nut, with which he was acquainted in Sumatra (close of the 13th century) under the name of "noçi d'India." Cf. Pauthier's Marco Polo p. 573: "Ilz ont moult grant quantité de noix d'Inde moult grosses qui sont bonnes à mangier freshes." The name "Cocos" now the common one among Europeans seems to date from the time Magellan circumnavigated the globe 1519-22. Pigafetto, the companion of Magellan, found these fruits first on the Ladrone islands, where they were called "Cocos." (Cf. Sprengel, *Pigafetta's Weltreise* 1784.) Bontius (*Historia natural Indiae orientalis* 1631, p. 45) calls the Cocoa-nut "*nux indica, a Lusitanis Coquo dicta*."

At the end of the description of the Cocoa-nut in the Pên-ts'ao mention is made of three other trees, which the author ranges under the same head.

The 青田核 *Tsing-tien-ho* (green field nut) is said by *Tsui-pao* (an author of the fourth century) to grow in a country called 烏孫 *Wu-sun*.* The tree has a great nut, which, if cut down and filled with water, changes the water into wine of a pleasant taste. This beverage however spoils quickly. Some of this wine was obtained by a ruler of 蜀 *Shu* (an ancient name for *Szechuan*) towards the close of the Han dynasty (first half of the third century.) It is difficult to say what tree here is meant, but it seems to have nothing in common with palms.

The two other trees mentioned, the *Shu-pou-tsiu* and the *Yen-shu* relate to other palms, and particularly the Palmyra palm, and will be treated under this head.

I have given in the preceding remarks a literal translation from the Pên-ts'ao, as regards the Chinese accounts of the Cocoa-nut, in order to show the Chinese method of editing and compiling scientific works. But, as the numerous repetitions as well as the unsystematic putting together of the statements would be very tedious for the reader, I will

* The *Wu-sun* were a nomadic nation, who lived first on the Western frontier of China (modern Kansu.) But about 170 B. C. they emigrated together with

the 大月氏 *Ta-Yue-chi* (Ti.) Massagetae, to Western Asia. Cf. *T'ien-han-shu* (Hist. of the Ant-Han.) Chap. 96.

in the further translations set in order the various accounts and quote the names of the authors and the time they wrote only, when they have a particular interest.

2. 檳榔 *Pin-lang*,

Betel-nut. Areca Catechu.

P. XXXI. 15, Ch. W. XXXI.

Shi-ming (Explanation of names.) The Nan fang ts'ao mu chuang (4th century) explains the name *Pin-lang* by the custom existing among the people of 交 *Kiao* and 廣 *Kuang* (modern Kuang-tung,) of presenting the Betel-nut to a guest. The character 檳 is formed by the characters 木 tree and 賓 *Pin guest*; the character 榔 *lang* includes the character 郎 *lang* meaning "master," a complimentary term. The Chinese author remarks, that the omission of presenting Betel-nut to a guest would be a mark of enmity. But it seems more likely that the name *Pin-lang* is a corruption of the Malayan name of the Areca-nut "pinang." As the Chinese language is very poor in sounds and almost every sound relates to numerous hieroglyphs of various significations, it is not difficult in transcribing foreign names by Chinese sounds, to find out characters of a suitable meaning.—Another name for the Areca-nut is 賓門 *Pin-mên* (guest's door.) The poet Ssü-ma-siang-ju (second century B. C.) calls the Areca-nut 仁 頻 *Jen-pin* (Jen-kernel.) Another name 洗瘴丹 *Si-chang-tan* (the red, washing away distemper,) refers to the sanitary virtues attributed to the Areca-nut.

The Betel-nut has different names in almost every part of Asia. The Malayan name is *Pinang*. According to Sir. W. Jones (Asiatic Researches IV p. 312) the Sanscrit name is *gucaca*. Synonyms (given also in the Amarakocha I p. 116.) are *ghóntá*, *puga*, *kaptura*, *crāmucca*. The vulgar name in Hindostani is *suppuri*. In Javanese its name is *jambi*, in Telinga *Areca*. This latter name was brought by the Portuguese to Europe in the 16th century. The scientific species-name of the tree (Catechu) derives from *Cat'h*, the inspissated juice of a Mimosa, which is chewed with thin slices of the *ulvega* or Areca-nut. Sir. W. Jones observes, that the Areca Catechu should be called A. Guraia.—The Arabians know the nut by the name *faujel*. Cf. Voyages d'Ibn Batuta (14th century,) traduit par Sanguinotti, II

204.) The name Betel relates properly only to the leaf of Betel-pepper (see below,) which is chewed together with the Areca-nut, but it is falsely used also to designate the latter.

Botanical description of the Pin-lang. By joining logically the numerous statements of different Chinese authors at different times about the *Pin-lang*, as quoted confusedly in the *Pên-ts'ao*, we have the following very correct description.

The *Pin-lang* resembles the Ye-tsü (coconut tree) and the Kuang-lang (Caryota.) The trunk is straight, branchless, articulated like the Bamboo, 50-70 feet in height. From the top proceed large leaves similar to the leaves of the 芭蕉 *Pa-tsiao* (Banana), which agitated by the breeze sweep the heaven like great fans. In the second or third month a 房 *Fang* (literally a house but here meaning the spathe) arises by a swelling between the leaves, from which, after bursting proceeds a panicle 穗 like the panicle of millet, bearing about 100 white fruits, of the size of a peach or a pear. Below are spines, one over another. The fruits 實 are ripe in the fifth month. They are then as large as a hen's egg, and surrounded by a coriaceous rind 皮殼. Within the rind is a white edible flesh (pulp), which however cannot be preserved in a good state for more than several days, as it quickly spoils. But if treated with lime, roasted or dried in smoke it can be preserved for a long time. The nut 核, within the flesh is veined if broken. It is of a bitter and harsh flavour. The *Fu-liu-t'ing* (Betel-leaf, see below) and lime must be added, then the flavour becomes soft, sweet and agreeable.

The Chinese distinguish from the form of the nut numerous species or varieties. In the *Pên-ts'ao* the following are enumerated. A large sort, of a flattened form and harsh flavour is called 大肚子 *Ta-fu-tsu* (great stomach) (P. XXXI 19) or 雞心 檳榔 *Ki-sin-pin-lang* (fowl's heart *Pin-lang*) or 豬檳榔 *Chu-pin-lang* (pork *Pin-lang*). This is used as medicine. A small sort bears the name 山檳榔 *Shan-pin-lang* (hill *Pin-lang*).—The 蒟子 *No-tsu* or 檳榔孫 *Pin-lang-sun* (sun=grand child) is similar to the last but the

smallest of all sorts. It is good for eating.* Some Chinese authors speak of a roundish, large and a little conical sort. Our botanists distinguish also several species of *Areca*, which give edible *Areca* nuts. I find in Lamarck's Botany, I 239: *Pinanga callaparia* Rumph., *Areca magno fructu*, nucleo subrotundo, acuminato,—and *Pinanga nigra*, Rumph., *Areca parvo fructu*, nucleo oblongo, conico, fuscente. Lindley (Treasury of Botany) mentions *Areca Dicksonii* in Malabar, which furnishes a substitute for the true Betelnut to the poorer classes.

The most ancient Chinese work, which mentions the Pin-lang seem to be the *San-fu-huang-tu*, a description of the public buildings in Chang-an (now Si-an-fu in Shen-si), the Chinese capital at the time of Emperor Wu-ti, 140-86 B. C. There it is stated, that when Yüe-nan (see below) was conquered (B. C. 111.) some remarkable Southern plants and trees were brought to the capital and planted in the Imperial garden (*Fu-li-kung*). Among these trees were also more than 100 Pin-lang. Probably at that time the Chinese became first acquainted with this kind of palm.—*Liu-sün* (an author of the T'ang, 618-907) states, that the best Betelnut is brought by vessels to China and that these growing in China are inferior sorts, namely *Ta-fu-tsu*. The History of the Liang (502-557) mentions 于阗利 *Yü-to-li* as a foreign country, which produces Betelnuts of a superior quality (Liang-shu Chap. 254, Hai-nan-kuo). There it is said, that Yü-to-li lies on an island in the Southern Ocean. The author of the historical geography *Hai-kuo-tu-chi* may be right in assuming, that this realm was in Sumatra. The History of the T'ang (Description of the barbarous regions of the South, Chap. 258^a) names the following as countries, in which the Betelnut is chiefly produced; 環王國 *Huan-wang-kuo*, 哥羅 *K'o-lo*, 真臘 *Chên-la*, 婆賂伽盧 *Po-hui-kiä-lu*.—The *San-fu-huang-tu* (first century B. C.) calls 南越 *Nan-yüe* a betelnut growing country.—In the *Nan-fang-ts'ao-mu-ch'uang* (4th century) it is said, that the Betelnut grows in 林邑 *Lín-yì* and 交趾 *Kiao-chi*. According to other authors it is found also in 扶南

Fu-nan.* *Su-kung* (an author of the Tang dynasty) states, that the Pin-lang grows 交州 *Kiao-chou*, in 愛州 *Ai-chow* and in 崑崙 *Kun-lun*. The above mentioned countries refer all to India beyond the Ganges and the Malayan Archipelago. Our botanists agree in the view, that the islands in the Malayan Archipelago (the India aquosa) and especially Sumatra are the native country of *Areca Catechu*, for it is only on these islands, and the Philippines, that the palm can be found in a wild state. The export of Betelnut from Sumatra is enormous. The Betelnut palm grows also plentifully on the adjacent coasts of the mainland, but its geographical distribution is more limited, than that of the Cocoa-nut. In British India *Areca Catechu* grows only cultivated and hardly exceeds the tropical limit. To the East from the Malayan Archipelago the growth of the *Areca*-palm soon ceases.

* As these names of countries often occur in Chinese botanical works, I may be allowed to make here a few remarks on these Chinese geographical names, which relate almost all to places in India beyond the Ganges.

In ancient times, up to the time of the Han dynasty (3rd century B. C.) the little known countries to the South of China, namely the Southern borders of the present China, and Tonking, Cochín China were called by the vague name 南越 *Nan-Yüe* (Southern boundary.) Some Chinese historiographers report that in the year 2350 B. C. an Embassy was sent from 越 *Yüe* to the Emperor Yao. Another Embassy proceeded from this country to the Chinese Court about 1100 B. C. The envoys are said to have brought as presents white pheasants and to have been sent back with a South-pointing chariot. This country *Yüe* is also identified with Tonking, Cochín China by some Chinese authors (cf. Li-tai-ti-ti-chi VII 22b, and Hsi-kuei-tu-chi.) Others say, that it lay more to the South. (cf. Pauthier's Relations politiques &c. p. 5 and Dr. Legge's Shu-king. Part II p. p. 63-7.)

交州 *Kiao-chou* comprised at the time of the Han dynasty the modern provinces Kuang-tung, Kuang-si &c. (cf. Klaproth's tableaux historiques, map No. 7), in later times only a part of Kuang-si and the Northern part of Tonking (v. map No. 11.) According to the *Hsi-kuei-tu-chi* the *Kiao-chou* of the Tang dynasty corresponds with Cochín China and Annam. As the Emperor Wu-ti 140-86 B. C. conquered these countries he established here a Chinese province, of which one district was called 日南 *Ji-nan* (meaning to the South of the sun) and corresponds with the modern Tonking, another, the modern Cochín China, 交趾 *Kiao-chi* (meaning joined toes, for the inhabitants of this country had crosswise toes.) This name seems to have been the origin of the name Cochín China.—Since the year 679 these countries were called 安南 *An-nan* by the Chinese. The sounds *An-nan* render the modern name Annam.

愛州 *Ai-chow* belonged, according to the Geographical Dictionary Li-tai-ti-ti-chi (VII i.), at the time of the Tang to the modern Annam.

* Purefoy Cursory states: (Asiat. Journ. 1827 XXII p. 143 Remarks on Cochín China.) In Cochín China are 3 kinds of Betelnut, a red, a white, and a small kind, which is much exported to China.

As regards the growth of the Betel-nut in China I will quote the following from the Pên-ts'ao and other Chinese works. The most ancient description of this palm, in the Nan-fang-ts'ao &c., (4th century) does not say, that it thrives in China proper. The writers of the Tang and Sung (7-12 century) state that it grows in all departments of 嶺外 *Ling-wai*, (beyond the Mei-ling mountains, the modern Kuang-tung and Kuang-si.) The geography of the Sung dynasty notices the Pin-lang as a tribute of *Kün-chou* (Hai-nan.) The island of Hai-nan produces Betel-nuts extensively up to the present time. Mr. Sampson (l. c. p. 133) states that *Ling-shui*, on the South coast, produces the best. According to Mr. Taintor

The name 林邑 *Lín-yí* (Land of forests), known to the Chinese since the 3rd century A. D., is described in the History of the Liang (6th century) Chap. 54. It is said there that *Lín-yí* lies on the borders of *Ji-nan* (v. s.), and was called *Yü-chang* (v. s.) in ancient times. The capital is distant 120 li (3 li=1 English mile) from the sea and 400 li from the boundary of *Ji-nan*. To the South *Lín-yí* is bordered by water (Sea?) Kieppoth identifies on his map *Lín-yí* with Siam. Ritter (*Asien III.* 977) with Cochín China. The Wen-sien-tung-kao (14th century) states that 環王國 *Huang-wang-kuo* and 占城 *Chên-chêng* are other names for *Lín-yí*.

扶南 *Fu-nan* lies, according to the same work (*Liang-shu*) 7000 li to the South of *Ji-nan* (Tonking) on a bay 灣中, which stretches to the West of the sea. From *Lín-yí* it lies to the South-west, 3000 li distant. The capital is situated 500 li from the sea. There is a large river to the N. W. of it, 10 li broad, which flows to the East in the sea.—Abel Rémusat (*Nouv. Mém. asiat.* I 77) states, that by *Fu-nan* Tonking is meant. The *Hai-kuo-tu-chi* identifies *Fu-nan* with 暹羅 *Sien-lo*, or Siam. Although it is impossible to determine with certainty the position of *Fu-nan* from the vague Chinese description, there can however be no doubt, that it was a place in India beyond the Ganges. I venture moreover to observe that perhaps *Fu-nan* lay on the banks of the Mekong. Crawford states (Cf. Ritter l. c. III. p. 914) that the province Sadek in Cambodia is called *Fu-nan* in the Cochín Chinese language.—Since the time of the Sui dynasty 589-618, Cambodia was known to the Chinese by the name 真臘 *Chên-la*. In the History of the Sui it is said, that *Chên-la* was formerly dependent upon *Fu-nan*. Its position is given as to the South East from *Lín-yí*. The sea forms its Southern boundary.

崑崙 *K'un-lau* is the ancient name of a range of mountains in Central Asia, but the Chinese use these characters also to designate the island *Pulu Condore* near Cambodia.

哥羅 *K'o-lo* or 哥羅富沙 *K'o-lo-fu-sha* lies according to the Tang history (Chap. 258a) to the S. East of 盤盤 *Pan Pan*, but about this country it is there said, that it lies on the sea, to the S. West of *Lín-yí*, from which it is separated by a little sea. From *Kiao-chou* it can be reached by ship in 40 days. Therefore it can be assumed, that by *K'o-lo* an island near Malacca or in the Malayan Archipelago is meant.

(l. c. p. 14) the *Areca* palm flourishes in the Eastern and Southern parts of the island. The land on which it is grown is subject to the payment of a land tax.—The great Geography of the Chinese Empire, *Yi-tung-chi*, states further, that the Betel-nut thrives in *Tai-wan* (Formosa,) in the department of *King-yüan-fu* in the province of Kuang-si, (according to the Kuang-si-t'ung-chi also in *Chên-nang-fu* in the same province.) in *Yüan-kiang-chou* in Yün-nan. The special Geography of Yün-nan notices also *Lín-an-fu*, *Kuang-nan-fu*, as Betel-nut countries.—The French explorers of the Mékong (*Revue des deux mondes* 1870 p. 340) have seen the *Areca* Catechu near Yüan-kiang, in Yün-nan (23½° latitude): "La ville de Yuen-kiang, assise au bord du fleuve (Sonkoï) était entourée de champs de riz a demi coupés, de bois d'aréquiers, de champs de canne à sucre &c."

In the tropical countries, where the *Areca* palm thrives, there is to be met everywhere another plant closely connected with the Betel-nut, however not by botanical alliance, but only by the combined use made of both plants by the people of these regions. The Betel chewing nations can hardly imagine the *Areca*-nut without the leaf of *Betel-pepper*, which has given its name even to the nut. The Betel or *Areca*-nut is prepared for chewing by cutting it into narrow pieces, which are rolled up with a little lime, obtained from oyster-shells, in leaves of the Betel-pepper. This pellet is chewed and has formed for a long time an indispensable dietetic requisite and healthy regulator of all classes of men in Southern Asia. It is known, that by Betel chewing the saliva is tinged red. It stains also the teeth and is said to produce intoxication in the beginning. The Betel-pepper, *Chavica Betel* (another species *Chavica Siriboa* is used for the same purpose,) is a twining plant with large oval acuminate shining leaves, and flowers in long spikes. It belongs to the order of Piperaceae and is widely cultivated in tropical and intertropical Asia, so that its native country now can not be fixed.

The common Chinese name for the Betel-leaf is 蔞 *Lou* or 蒟 *Kü*. According to Bridgman's Chrestomathy the second character is pronounced *Lau* in the Canton dialect. In the Pên-ts'ao the Betel-pepper is described (XIV^a 46) under the name of 蒟醬 *Kü-tsiang*. Li-shi-chên explains, that it regulates the digestion. Therefore the first character includes the character 均 meaning "strong," the second means "Soya."

(To be continued page 264.)

THE FOURTH COMMANDMENT, ITS AUTHORITY AND EXTENT.

BY REV. L. B. PEET.

(Concluded.)

4. This theory of no Sabbath obligations upon any, but upon the Jews only, has done, and is still doing, much evil. It leads many to magnify little things to support the theory, and to overlook the most weighty considerations, which, if duly considered would overthrow it at once. The change of the name of the day, and of the day itself, are made a great deal of, as though they were of vital importance. Whereas we have already shown that such changes can effect really nothing towards altering the real character, and claims of the day. The fact that Christ and his Apostles sanctioned the change, and that there is no evidence that the 4th commandment has ever been abolished, are amply sufficient of themselves, to overthrow every such theory against the perpetuity, and sanctity of the Sabbath day. Again the Sabbath is caricatured as Puritan, Scottish, English, and "a burden which neither we nor our fathers have been able to bear;" while the great fact, that America, Scotland and England to day, owe more to the Sabbath, for what distinguishes them for their intelligence, prosperity and influence overall of the other nations of the earth, than to any other one precept of the gospel, is entirely overlooked. Again we are cautioned by the advocates of this theory against laying upon the members of our infant Churches (in China) unnecessary burdens &c., while the theory itself throws wide open the door to infidelity and irreligion of all kinds to be practiced as innocent amusements on the holy Sabbath. The man who spends the Lord's day in boating, horse racing, gambling or any other amusements of a like kind, according to this theory, violates no law of Christianity, and is called a Christian, while the heathen Chinese sneeringly point the finger and ask is that Christianity? Is that the way you worship your God? May a man who does these things, and is also guilty of the many other vices which usually accompany them, be still a Christian? According to the above theory all of these questions, and similar ones which might be put, must be answered in the affirmative. Now what motive does this theory furnish to dissuade the Chinese converts, from becoming just such Christians? It is, "That they," that is our Chinese converts, "should be taught that as to this day (the Sabbath) there is no absolute rule, but that it is left to their conscience, and that the more they keep this day to the Lord, the better Christians they will be." This is all! Conscience is to decide the whole matter! God's word, so far as it touches upon the Sabbath is to be ignored! Is not this feeding the infant church on husks? Nay worse, is it not the milk of infidelity? God is nothing! His Spirit is

nothing! While conscience is every thing! Alas for such a church! It may have a name to live but it is dead!

5. This theory detracts not only from God's Word, but also from his Authority over his creatures. The 4th commandment being disposed of by it, as "binding only upon the Jews," and the other commandments according to the same theory, "having no authority simply because found in the written word," where is any place left for God to exercise his authority over his creatures of the human family? No portion of time is set apart by him for his worship.—No emphatic "*thou shalt not*" is now addressed to any but to the Jew only.—And the Sabbath, according to the same authority, "is now left to the guardianship alone, of enlightened Christian conscience." Time and service are the prerogatives of Sovereignty. Diminish the one, or adulterate the other, and you degrade the Sovereign in the eyes of his subjects. Time and service are both included in the Sabbath. Take from either, what is God's due, and you degrade his authority in the eyes of the universe. The faithful keeping of the Sabbath [by whatever name it may be called,] manifests more respect for the authority of God, than the simple external observance of all of the other commandments put together. And it often requires greater self-denial to do this, than to observe all of the others combined.

6. This theory leads to wrong views of the character of God's law and its design. The same late writer on the subject of the Sabbath finds much difficulty in training the native members of a Chinese church to keep the Sabbath. He says they do not do it, and thinks they cannot be made to do it. This has led him to go over the whole subject and his investigations have resulted, among other things, in bringing forward such suggestions as the following: "[1] That missionaries themselves should once more consider this an open question, and again work out an unbiased conclusion thereon. [2] That those missionaries who enforce strict Sabbath observance of the Lord's Day on their unchristian employees, as on servants, teachers and the like, should consider whether or not they are not dishonoring the Gospel by the use of unfair, unmanly, and illegitimate pressure. [3] That those missionaries who have made strict Sabbath-keeping a *sine qua non* of church membership should consider whether or not they have adequate witness as to the genuineness of such Sabbath-keeping and whether or not, by such strictness, they have not kept out of the church men who ought to have been in it. [4] That inability, or even unwillingness to devote the whole of Sunday to rest and worship should not prevent a candidate, otherwise qualified, from receiving baptism. [5] That no more should be required of converts than that they should attend divine service twice, or at least once on the Lord's Day. [6] That they should be taught that as to this day there is no absolute rule, but that it is

left to their conscience, and that the more they keep this day to the Lord the better Christians they will be. [7] That for those who are both able and willing to devote all of their time on Sunday to sacred purposes, something should be found to do. Sunday schools, tract distribution, prayer meetings, a supply of interesting religious books, and other things have been suggested. For, far better had the Chinaman work through the spare hours of Sunday, than spend them in listless sloth, or idle gossip" &c.

These suggestions imply among other things that the 4th commandment, which cannot be shown to have been abrogated, may be wholly neglected or but partially obeyed without incurring any severe penalty. But we are taught in the word of God that every breach of his command incurs a death penalty. "The soul that sinneth it shall die." "Sin is the transgression of the Law." Even the heathen philosopher Confucius perceived and acknowledged this penalty of sinning against Heaven. He says, "sinning against Heaven, there is no place for prayer, i. e. forgiveness." The moral law of God, by which I mean the Decalogue, is like his own nature perfect, and cannot be altered. Even the work of Christ does not diminish one iota from the strictness of that law: it only intensifies its claims as a rule of duty, to God and to our fellow-men, and extends alike to the whole race. Christ obeyed that law perfectly, and in addition to all of its just claims, he suffered the death-penalty due to every transgressor of that law, and thus wrought out a vicarious atonement for the sins of the whole world. Hence the design of the law, is to convict men of sin, and to bring in the whole world guilty before God, for "by the deeds of the law there shall no flesh be justified in his sight; for by the law is the knowledge of sin."

Hence the suggestions above quoted, seem to be very much out of place on such a subject as this, and the theory on which they are based can have no other than an evil tendency, alike dishonorable to God, and destructive of the souls of men, for it bids us to cast away the very instrument by which these souls are to be brought to a knowledge of their sins, and to a saving knowledge of Jesus Christ their Savior. Now in respect to some of the above suggestions which intimate that missionaries, who insist upon their employees observing the Sabbath with too much strictness, may be "dishonoring the Gospel, by the use of unfair, unmanly, and illegitimate pressure," we would offer the following remarks. [1] The "employees" referred to are, by the supposition, paid for their whole time and belong to our families in such a sense as that used in the 4th commandment. We tell them promptly when they enter our employment, that we dare not employ any who are permanently connected with our families and paid for their whole time, who are unwilling to comply with the injunction laid upon us by the command of God. There it is. They are referred to it,

and are taught what it means. This leads them at once to see the Authority under which we act, that we exact no more of them, than what we do for ourselves. Indeed, that it is not our requirements, which we are enforcing, but that it is what God puts upon us to enforce upon all connected with us. Christ has defined this day to include works of necessity and mercy. Hence to prescribe to any one under our direction that he must attend church so many times on the Sabbath; or read so much Scripture, or to attend to any other specific religious exercise, in order to observe the Sabbath properly, is giving but a partial view of the subject. The authority and glory of God, are the great points to be kept constantly in view, and to be insisted on. He who has correct views on these points and acts accordingly, cannot go wrong. A person, in certain circumstances, may acknowledge the authority of God as clearly and glorify him as fully in spending the Sabbath at home or in labouring all day for the sick or to save the property of his neighbour from a destructive fire or flood and the like, as he could in attending church all day in other circumstances. That mercy is better than sacrifice, is an acknowledged principle of the Divine Government. In all of this, we fail to see anything "unfair, unmanly," or derogatory to the Gospel, in missionaries who thus interpret the 4th commandment and insist upon its observance, while on the other hand, those who fail to do this, we think are justly liable to such charges. [2] As to the difficulty complained of bringing native Christians to a strict observance of the Sabbath, we would suggest, that much depends upon previous instruction and training. If our own teachings and practice, in regard to the Sabbath have been faulty, such will be that of our converts. "Whatsoever a man soweth, that shall he also reap."

3. In the suggestion, "that missionaries themselves should once more consider this an open question, [that is the Sabbath,] it seems to be implied that "missionaries themselves" are not so well grounded in their views on this subject as they might be, or as they would be, if willing to consider it again, "an open question and work out an unbiased conclusion thereon." If this inference is a true one in respect to any considerable number of our missionary brethren in China, then the suggestion is timely and most important to all such missionaries. They ought to know at once, whether they are drifting. If, "an unbiased conclusion," leads them to adopt the non-Sabbath theory, then we believe they are drifting towards a vortex of fearful magnitude and most certain destruction. This theory overthrows the two great pillars on which all true Christian faith must ever rest, viz. The Plenary Inspiration of the Scriptures and the Divinity of Christ. These gone! All are gone! The above theory cannot be maintained on any other ground, than by detracting from the Authority of God's word, and from

the Divine character of his Son. Infidels and disbelievers in both his Word and in his Son find no difficulty in receiving this theory and are happy in extolling those who advocate it. And why is this? Because it suits their unbelief. The great battle field of truth and error of the present day, which is seen looming up in the distance, is the Sabbath. And God's Word and the Divinity of his Son are the strong-holds which the enemies of the Sabbath are seeking to carry. They bring into the field a great array of forces, intellectual, physical, political and moral. New theories of the heavens and of the earth. New discoveries in mind, and in matter. New processes and new developments, in the vegetable and animal kingdoms. The geological strata and different formations of the earth, its fossil remains of extinct classes of animal and vegetable life with new and startling theories based thereon, are all made to fire off great guns against the Bible and against the Miracles of Christ, and ever and anon a sound of triumph goes up from the enemies' camp as though they had already proved the Bible to be unworthy of credit, Christ to be nothing more than man, and the Sabbath like any other day. Shall the leaders in the sacramental host be terrified at this, strike hands with the enemy, compromise the truth and call that defending it? Because I cannot tell *how*, and *why*, certain things are what they seem to be, must I therefore, give up fundamental truths based upon the most irrefragable evidence, and receive a theory which robs God of his Honor, his Word of its Authority, and his Son of his Divinity? This indeed may be pleasing to his enemies, and to the enemies of truth and righteousness, who may be willing to bestow their applause on us for so doing.

But what of the native Church members of this land, who have been trained under this theory? Alas! they do not keep the Sabbath! And is that strange so long as they are taught, that "as to this day there is no absolute rule, that it is left to their conscience &c?" All that is found in the Bible on the subject of the Sabbath, becomes at once a dead letter to them. The solemn warnings or the glowing promises, respecting its neglect or its observance, all fall upon their ears as so many uncertain sounds of the remote past, which they may heed or neglect with impunity.

May the No-Sabbath-obligation theory never overshadow the infant churches of this land; nor deprive its members of the life giving power, and abundant blessings which the faithful keeping of the Sabbath always bestows! May the future members of the churches of the land of Sinim, be in number and in graces like the spires of grass in the morning dew all gleaming with life, and holiness in the sun-beams of Christ's righteousness, when he shall see of the travail of his soul and be satisfied.

Fellow Missionaries to "the Sons of Han," and Brethren in the Lord! Suffer a word of exhortation. Let us stand fast in the liberty wherewith Christ hath made us free. Let us see to it, that the gospel trumpet in our hands gives no uncertain sound, and that its banner be kept constantly unfurled, for the coming of our Lord draweth nigh.

WHEN WAS BABYLON DESTROYED? REPLY TO MR. PHILLIPS.

BY E. BRETSCHNEIDER, ESQ., M. D.

I hope that, notwithstanding the rigorous reprimand given by Mr. Phillips to the Editors of *Notes and Queries* and *The Chinese Recorder*, for having inserted my articles in their columns, the Editor of the *Recorder* will not refuse to admit a short reply of mine to the protest of Mr. Phillips in the September Number of this Journal.

Mr. Phillips in his reply has not taken the trouble to refute any one of my statements. It proves, that I was right. I will not lament over the attacks against me, like Mr. Phillips, but will defend myself directly.

Mr. Phillips asserts, "that in my haste to find fault with him I have fallen myself into a blunder. To this I emphatically demur. In stating, that Babylon was destroyed before the time of Alexander the Great, I would prove, that Babylon in the first century B. C. could not be "the glory of kingdoms, the beauty of the Chaldees' excellency," as Mr. Phillips states. In order to prove this, I required not to adduce details from ancient history, for it is known, that Babylon after the death of Alexander the Great in the 3rd century B. C. was a miserable village. I restricted myself to saying, that Babylon was destroyed before the time of Alexander. It would have been more correct to have stated: Babylon was in ruins at that time.

As Mr. Phillips seems to possess only historical works of an elementary kind, as he states himself (namely Child's Guide to knowledge and a

Catechism of ancient history *) I may be allowed to quote for him some lines from a renowned historical work on Babylon.

C. I. Rich, Babylon and Persepolis 1839, Introduction p. XX. states: "Darius continued the work of desolation begun by Cyrus, and, not satisfied with destroying the other walls of Babylon, he shed much blood within the city."

On the same page it is said:

"We learn from Herodotus, that Xerxes laid hands upon the massive statue of gold in the temple of Belus, of which Darius had not ventured to make himself master."

P. XXII: "Alexander, who was very desirous of restoring the splendour of Babylon, undertook to rebuild the temple of Belus; but the mass of rubbish under which it lay buried was so immense, that Strabo tells us, 10,000 men would have been required to work for two months in only clearing it away." †

P. XXV: "Seleucus Nicator, who succeeded Alexander in this portion of his empire determined to abandon Babylon altogether, and to transfer the capital of his empire to the city, which he had found on the banks of the Tigris, and to which he had given his own name. Pausanias informs us, that the Babylonians were compelled by that prince to come and settle there. The walls of Babylon, adds this author, and the Temple of Belus, had almost ceased to exist. Strabo says: the *Perians destroyed one part of Babylon*, and time and the indifference of the Macedonian princes completed its ruin." This ought to suffice to show, that Mr. Phillips's statement about Babylon was unfounded.

As regards the passage in Mr. Phillips: "It is strange for a man, who sets himself up as an Historical critic, to lead us to infer that Syria was a

* But these works seem to be a new acquisition. Mr. Phillips did surely not possess them at the time he wrote, that Nineveh and Babylon were the Glory of kingdoms &c., in the first century.

† The Temple of Belus was the Glory of Babylon. At the time of Alexander this certainly did not exist.

vassal state of Parthia." I beg Mr. Phillips to read again my statement about Tiao-chi (*Notes and Queries* IV p. 60.) It is said there: "I shall by no means add a new hypothesis to those already brought forward about ancient Tiao-chi. No accurate deduction can be drawn from the superficial Chinese accounts &c. It must therefore remain undecided whether Kan-ying reached the Caspian sea, the Persian gulf, or Syria." If I ventured the remark, that some accounts given by the ancient Chinese about Tiao-chi suits with Syria, ‡ it does not follow from this, that I wish to impose my opinion on the learned world. No where in my articles can such pretentious passages be met as in Mr. Phillips's notes on Tiao-chi (*Notes and Queries* III p. 119): "Having, I think, sufficiently proved in my former notes, that Tiao-chi was situated in Sumatra and not upon the borders of the Caspian sea &c." No where in my articles have I presumed to set myself up as an Historical critic, as Mr. Phillips asserts. In my article on Chinese Geographical names (*Notes and Queries* IV p. 50) he can find my programme:—

"I beg to observe to my readers, that I shall especially have the advantage of making use of material already worked up by well known European savants." I confess, that my historical and Chinese knowledge is very superficial, as my professional calling has nothing in common with historical research. But it seemed to be sufficient to enable me to refute the errors stated by some contributors of *Notes and Queries* and the *Recorder* about questions, which have long ago been decided by eminent savants in Europe.

PEKING, 29th Sept. 1870.

‡ I have not laid any stress upon the statement of the Chinese authors, that Tiao-chi was a vassal state of Parthia. It is known, that before the Chinese were acquainted with the English arms, they believed also, that England was a vassal-state of China. I would however observe, that Parthia in the first century B. C. stretched to the West until near the Syrian coast. Cf. the map No. 6 of Klaproth's *Tableaux historique de l'Asie*.

REVIEWS OR LITERARY NOTICES.

I.

DEATH BLOW TO CORRUPT DOCTRINES:—A Plain Statement of Facts. Published by the Gentry and People. Translated from the Chinese. Shanghai 1870.

Having promised to notice promptly New Books and Pamphlets relating to China and the Chinese if sent to us, we address ourselves to the task with unfeigned reluctance in the instance before us. In the first place we respectfully solicit from our contributors and correspondents, a much more worthy and able notice of the pamphlet than we can supply. It is too remarkable a production to be passed by with such a hurried notice as we can give. It has already had many readers whose minds must be full of thought in regard to a large variety of subjects it illustrates or teaches.

To our readers who can obtain a copy, we say do so, and read and inwardly digest it yourselves. To those, who living in distant lands, will find it difficult to procure it we briefly state: This is a translation (occupying 60 odd pages,) of a Chinese work compiled by a Chinese scholar of evident ability professedly from considerably over 100 Chinese books, published in various places and at different times in China for the last 200 or more years, and is designed to prejudice and enrage Chinese against foreigners. Were we to attempt to characterize it, we could employ with propriety a large number of bad sounding and bad meaning adjectives, as false, hypocritical, malicious, devilish, infamous, obscene,* vulgar, &c., ad infinitum or at least ad nauseam.

The fact that it is circulated from Yamens in certain parts of Shantung, as is well known to the translators, with secrecy in the hope of keeping it unknown to foreigners, is significant.† It

* ["It is not an ordinary obscene book nor are its obscenities their own end. They have a subtle aim. It is to connect with the very idea of a foreigner, associations the fondest and most repulsive." Preface 8th page.]

† ["In every instance in which it has been heard of, the parties possessing it have asserted that it was obtained from the Yamen." Preface 8th page.]

corroborates the prevalent opinion among foreigners in China that all or nearly all of the riots and lawless proceedings on the part of the people against foreigners are incited and encouraged by officials. Those who believe or who affect to believe differently are recommended to peruse this translation and its preface. We remember of hearing an old foreign resident at Amoy several months ago affirm that all of the excitements against foreigners there (about two per annum) for several years are traceable to Chinese Yamens. While it is not a book for promiscuous circulation, we think it is worthy of being read by the friends and the enemies of missions to the Chinese, by the directors and agents of missionary societies represented in China, by Editors and writers for the Press, every where, and by high Officials in western lands having treaties with this country, and by all who try to lead or form and influence public opinion regarding the Chinese.

We make a few random selections:—

"Brothers and friends seldom see each other, but when they meet, they give themselves up to licentious intercourse. They call this 'reunion of original elements.'"

"The bride is required to spend the first night with her religious teacher. This is called 'holy introduction to the net of pleasure.'"

"Those who enter this religion practice sodomy with the priests without restraint. This is called 'adding to knowledge.'"

"When a father dies his son may marry his mother."

"A man may also marry his own daughter."

"They also marry with their own sisters."

"When friends meet they enquire about each others wives, but never about their parents. They regard parents as belonging to a past period."

"In case of funerals, the religious teachers eject all the relations and friends from the house, and the corpse is put into the coffin, with closed doors. Both eyes are secretly taken out, and the orifice sealed up with a plaster. This they call 'sealing the eyes for the western journey.'"

"The reason for extracting the eyes is this. From one hundred pounds of Chinese lead, can be extracted eight pounds of silver, and the remaining ninety two pounds of lead can be sold at the original cost. But the only way to obtain this silver is by compounding the lead with the eyes of Chinamen. The eyes of the foreigners are of no use for this

purpose. Hence they do not take out those of their own people but only those of the Chinese."

"While this is true of western nations generally, it is especially so of England and France. The people have an outward show of gentility, but their hearts are full of deceit. Their appearance is such as is easy to deceive."

"When a person enters this religion, the teacher gives him four ounces of silver and a pill. When he has taken the pill his whole mind is confused and darkened, so that he destroys his ancestral tablet and only worships an image of a naked child, which points one finger towards heaven and the other towards the earth. They say this is the Prince Jesus."

II.

BOARDING SCHOOL REPORT.—We desire to draw attention to some of the Facts and Views embodied in the Annual Report of the Boy's Boarding School at Foochow under the charge of Rev. Arthur W. Cribb, C. M. S. for its Fourth Year 1869-1870.

The expenditure during the year has exceeded the total receipts by \$160. This unpleasant circumstance we think is undoubtedly owing to the fact that our humble suggestion to be found on page 263 of 2nd Vol. of RECORDER which we made while noticing the Report of the same school for 1868-1869 was not largely adopted by the Merchants of Foochow.

The number of pupils has been 16. The building will accommodate 24 boys. The Superintendent gladly proposes as a Resolution, "*That Eight more pupils be admitted as soon as possible.*" He enquires "who will second it." Nine pounds sterling will support a pupil for a year. Mr Cribb speaks encouragingly of the progress of the lads. He remarks:

Their character as a whole has been good, though of course, as may be expected among a class of sixteen boys varying from 13 to 19 years of age, mischief has occasionally sprung up which for the time has caused temporary sorrow. This however need not discourage us. "In due season we shall reap if we faint not." Let the friends and subscribers to the school be more earnest in prayer for the outpouring of the Holy Spirit, for it is He alone who can apply the truth to their consciences. With two exceptions all the pupils are professedly Christians. Ten of their number have been baptized, four more are also members of Christian families, and might have been baptized with the other members

of the family, but being over 14 years of age it was thought that they might be considered as having come to years of discretion, and therefore some evidence of repentance and faith should be first required of them. The remaining two would certainly deny that they are heathen, for though unbaptized and unconnected with Christian families, they profess to believe in the doctrines of the Gospel, and have on several occasions asked to be admitted to the Church. The superintendent wishes, so far as he is concerned, to avoid indiscreet haste in such an important matter; hence their request has not yet been granted.

Should any of our readers be disposed to second the above resolution, which seems to us to be quite sound in principle and well worthy of being passed, (*not passed by.*) Mr. Cribb will assist them by receiving and adopting any pecuniary arguments offered to him, as will Mrs. Cribb 38 Selw Square, London, thus making the addition of 8 more lads not only possible but actual. We shall be happy to record the adoption of said resolution one year hence.

PROTESTANT MISSION IN LAO-LING, SHANTUNG.

Perhaps the readers of the RECORDER may be interested in seeing a description of Protestant missionary labour in Shantung, from the pen of a Jesuit. The following is copied from a letter in the "Annals of the Propagation of the Faith" for September 1870, and is written by the Rev. Father Leboucq, of the district of Ho-kien-fu, in Eastern Pe Chihli, where ninety congregations or parishes have been formed in six or seven years, containing from 10000 to 12000 neophytes. He calculates, for the future, on an average of 1,500 baptisms every year, but the previous page informs us that the "five pharmacies of the Holy Childhood, by baptizing every year from 1,000 to 1,200 dying children, contribute greatly to the extension of the Faith."

"On the eve of the festival of Saint Francis Xavier," the Rev. Father writes, "I was about taking the road to the North when a Christian from Chantong came to tell me that the Protestant minister residing in his village had

made great preparations for a grand dinner, to which he was going to invite his own followers and Monsignor Cossi's Catechumens.

"And here I must make a digression.

"It may be asked how and since when have the Protestants settled themselves in such remote regions, fifty leagues from Tien-tsin. Heretofore they were content to make some rapid excursions into the interior to distribute their Bibles, but they had not ventured, nor durst they, to establish themselves except in the great commercial centres, or at most in some of the villages situated close to the steamers and European residents.

About three years ago, a young native of Canton, belonging to the prefecture of Lao-lin, was dismissed from an English warehouse, in which he had been employed. Finding himself without money or occupation, he became a Protestant, and brought two English ministers to the village of Tchou-kia-tchai, promising that if they established themselves here, all his countrymen would be converted to Protestantism.

"Just at that time there were ten families of Catechumens who had been recently converted by one of our neophytes; and these poor people appeared to offer an easy conquest to the ministers. Thereupon, they addressed themselves in the first instance, to these parties; but without success. The preachers scattered money about in profusion, but the faithful wanted none of it. Less difficulty was experienced in the case of the pagans, and before long five hundred of them became Protestants, showing however, less eagerness to hear the doctrine of the ministers than to receive their sapees, and partake of the abundant repasts offered to them.

"During the three years that English or American money has been preaching the Gospel in Tchou-kia-tchai, the ten Catholic families have remained firm in the Faith. As for the five hundred disciples of Protestantism, after having received large gratuities, they disappeared by degrees from the church: there are hardly now more than forty

remaining. Several have expressed a wish to embrace the Faith of those who *do not sell their conscience*, and I have had the consolation of admitting among our Catechumens about sixty persons, who for the most part, had been already baptized by the ministers.

Of the four Protestant schools opened in Tchou-kia-tchai and the neighbourhood, two have already died a natural death; the third is in its last agony, and the fourth is in a very bad way indeed.

"Despite of these defeats, or rather in consequence thereof, the Protestant minister who was staying at Tchou-kia-tchai contrived to speak so very well of Saint Francis Xavier, that three or four Catechumens appeared to have almost made up their minds to accept his invitation, and fraternize with the Protestants at the feast which was to come off on the 3rd December.

"For the edification of our Christians, and the honour of Catholicity, it was necessary to stop the parties who, I had been told, were allured by the savour of English cookery. Moreover the intimate and fraternal affection which has always united the vicariate of Chantong to that of Eastern Pe-tche-ly, made it a duty incumbent on me to cross the frontier."

"Consequently I made my appearance about nine o'clock in the morning at Tchou-kia-tchai, and left it at four o'clock in the afternoon. The Protestants had the dinner to themselves, and it must be said to the credit of the Canton neophytes, that none of them would have yielded to the temptation or taken part in the festivities, even if I had not been there to present them!"

Will any of the correspondents of the *Recorder* living in the North give us their version of this deplorable story, and oblige those who are seeking to know the truth on both sides?

INQUIRER.

LONDON MISSION, WU-CHANG,

Jan. 14th, 1871.

ORDINATION IN TUNG-CHAU.

BY REV. J. B. HARTWELL.

Pastor of North Street Baptist Church.

At the request of the North Street Baptist Church, Tung-chau, a Presbytery consisting of the Rev. T. P. Crawford and the Pastor Rev. J. B. Hartwell, met on Saturday November 26th 1870, for the purpose of considering the propriety of ordaining to the work of the Ministry Mr. Oo Ts'wun Ch'au. After a protracted and severe examination of the candidate, which proved highly satisfactory, it was resolved to proceed to his ordination on the following day. Accordingly on Sunday November 27th, in the North Street Chapel, Mr. Oo Ts'wun Ch'au was publicly set apart, by the laying on of hands and prayer, as a Minister of the Gospel of Jesus Christ in the Baptist Denomination.

The following was the order of services. Ordination sermon by Rev. T. P. Crawford. Public examination of the candidate by both members of the Presbytery. Ordaining prayer followed by Charge by Rev. J. B. Hartwell. Presentation of Bible by Mr. Crawford. Right hand of fellowship by Messrs. Hartwell and Crawford. Doxology and Benediction by Rev. Oo Ts'wun Ch'au. The members of both the Baptist Churches in the city were present, and the occasion was a deeply solemn one. In the evening of the same day the ordinance of the Lord's Supper was administered in the North Street Chapel to the members of both Churches by the Rev. Oo Ts'wun Ch'au. In the same Chapel, on the following Sabbath, two Deacons were also ordained by the same Council with the assistance of the Rev. Mr. Oo. Thus our work is progressing, though slowly, yet we trust *surely*. The fact that God seems to be raising up a Native Ministry of so much promise in China is one of the *most encouraging* features of our work. Let this fact be used to encourage the Churches at home and abroad. Our work is *not to perish* with the death or removal of ourselves.

PREDICTION CONCERNING THE TA-TSING DYNASTY.

BY G. MINCHIN, ESQ.

A supposed prophecy has been current a long time among the Chinese, regarding the downfall of the present dynasty which was to have happened in the reign of the late Emperor Hien-feng. Notwithstanding this, his son Tung-chi is still on the throne. When the rebel King (Tien-wang) Hung-siew-tsuen occupied Nanking and many fortified cities, which he wrested from the Imperialists, I heard Chinese state, that the said prophecy was about to be fulfilled. Some were desirous to see this Dynasty come to an end and many even laid a wager to that effect. Others insisted that the Manchus were soon to be driven out of the empire. The strength of the said prophecy was supported by their interpretation of the following:

木立斗世天下低

The first represents $10 + 8$ the 18 years of Shunchi's reign.

The second represents 6 above 1, the 61 years of Kanghi's reign.

The third represents $3 + 10$, the 13 years of Yungching's reign.

The fourth represents 30×2 , the 60 years of Kienlung's reign.

The fifth indicates the 25 years of Keaking's reign, because Keaking is said to have descended from one of the 24 small heavens inhabited by the gods of the universe, and there was also one large heaven which was the place of the Supreme King, Yue' wang 玉皇, so there were 25 in all, which tally exactly with the number of the years of his reign. The people of Foochow do, at the present time, worship most reverentially the 24 small heavens, and on the paper lantern hanging over the middle of their front doors, one may see the characters 廿四諸天 written. The fact of his having been descended from one of the heavens, was proved by the character 天, in the said prophecy, falling to his lot.

The sixth indicates the 30 years of Taou-kwang's reign; for the character 下 having fallen to his lot, was interpreted according to the sense of the Astrologer as 一卜三十年. For the satisfaction of my readers, I refer them to the 易經 Yi-king.

The last and seventh character 低 was that lot which fell to the unlucky emperor Hien-feng, which is composed of 人 and 氏, and is interpreted to mean "another man." Had not assistance been rendered by Col. Gordon with men, and by the Foreign Customs with money, I venture to say, the empire would, long ago, have been in the hands of other parties. This emperor reigned only 11 years.

This prediction, is said to have been made some five hundred years ago, by the Martial Counsellor of Hung-wu, the first emperor of the Ming dynasty, named Liew-peï-wen. As no trace of it can be discovered, I grant that it is his only upon mere presumption; but it is generally believed by the Chinese to be the true case, though they can not prove the fact. I am anxious to ascertain the real state of the circumstance. I would like to see some light thrown upon this subject by some of the learned contributors to the *Recorder*.

HANKOW, 6th Sept. 1870.

NOTES, QUERIES AND REPLIES.

STAR ANISE AND FENNEL.

NOTE 24.—Dr. Bretschneider asks in Vol. 3 p. 221 of this Journal for the Districts in Fookien in which the Star Anise grows.

In reply to this question I may state that on turning over the pages of the Foochow-foo-chih 福州府志, the Tseuen-chow-foo-chih 泉州府志, and the Tung-gan-hien-chih 同安縣志, (the district in which Amoy is situated,) I find that the Star Anise is mentioned as one of the products of

these three regions. I am informed by Chinese that it also grows in Chang-chow.

The Star Anise is well known in Amoy among the common people under the name of Pa-kio-hiang 八角香. I have not a specimen of the plant but could easily obtain one. In the Local Histories above mentioned it is called Ta-hwuy and is mentioned thus:—大茴俗呼八角. Curious, however, to relate, much Star Aniseed is imported here from Canton.

The Siao-hwuy 小茴, otherwise called Shih-lo 蒔蘿, and by the common people of Amoy Pang-shih-hiang 有栗香, is undoubtedly Fennel.

This plant grows wild on Koo-lang-soo (Amoy).

I found also while looking for Star Anise in the Foochow-foo-chih the following relating to Tobacco, which may not prove uninteresting. The Yen-ts'ao 煙草, or Tan-pa-ku 淡巴菰, was first planted in the Foochow District in Wan-leih's reign 萬歷 (1573 to 1620).

B. CALDRONI.

AMOY.

THE WESTERN SEA 西海

NOTE 25.—Wishing to provoke discussion regarding the situation of the sea, called by ancient Chinese geographers the Western sea, I, in the December number of this Journal, stated, that in the She-wei 史緯 there is to be found a memoir of a certain Pai-keu 裴矩, in which is mentioned three roads by which the Western sea was to be reached from China.

I have already given the Northern route which terminated in that mysterious country called Fuhlin, the ancient Fatsin.

The central route to the Western sea lay through Tourfan 高昌, Karasher 焉耆, Kuche 龜茲, and Kashgar

蘇勒, across the Tsung-ling 葱嶺 mountains, and so on through several other countries till one arrived at Persia, which country communicated with the Western sea.

The last countries passed through before reaching Persia, were the Greater and Lesser An 大小安 and Mou 穆 kingdoms, all said to have been part of the ancient An-si 安息.

The Southern road lay through Pidgin 鄯善, Khoten 于闐, across the Tsung-ling range and Hien-tu mountains, and so on to Tsao 濛, the ancient Ki-pin 罽賓.

On leaving Tsao one entered Northern India 北婆羅門, and through that country one reached the Western sea.

This Southern road is, in all probability, the road followed by the Buddhist Pilgrim Fahien on his way to India.

I have nothing more to mention about this Southern Road, except that I do not think that 懸度 Hien-tu means Hindoo kush as suggested in Notes and Queries, Vol. 2 p. 153.

Matwanlin states that Hien-tu means "suspended way," and is applied to mountains in the Tsung-ling range, owing to the suspension bridges thrown across the mountains and vallies along the route.

I think it may be well to give a few examples to prove my correctness in stating, that the Persian gulph, the Arabian sea, and Indian ocean were known to the Chinese as the Western sea.

1. From the country of the 月氏 Yue-ti and 高附 Kao-fu (Cabul?) in a S. W. direction down to the Western sea is all considered as 身毒 India (Matwanlin T'ien-ch'uh).

2 師子國 Ceylon is situated on the Western sea (Matwanlin Szû-tsz-kwo).

3 It appears that in 天寶 T'ien-pao's reign (A. D. 713-756) a Chinese

general 高仙芝 Kao-seen-chih was sent against Tashkend, who had in his suite one 杜環 Tu-hwan who in A. D. 723 reached the Western sea, from whence in the commencement of 寶應 Pao-ying's reign about A. D. 756, he embarked on board a merchant vessel and returned to Canton by sea. (Matwanlin Si-yu-seu 西域序.)

This Tu-hwan gave the history of his adventures in a book called 經行記 King-hing-ki.

4 In the article 大食 Ta-shih in the Wen-hien-t'ung-k'ao it is stated that in a certain part of Arabia near the Western sea the Arabs and Persians live together. (Matwanlin Ta-shih).

GEO. PHILLIPS.

SINGULAR METHOD OF GROUPING CHARACTERS.

NOTE 26.—I have recently met with the following illustration of a certain method of grouping characters:

馬書	月朝
快生	月朝
馬書	月朝
快生	月朝
追問	月朝
步先	月朝
快生	圓夕
步先	
快生	
步先	
快生	

The first two columns may perhaps be rendered as follows: "The swift foot-soldier is swiftly pursued by the horseman." "The pupil of an incompetent teacher engages in the vain pursuit of knowledge." The other two

should be translated on the same principle. I wish to enquire if any one has met with similar examples? Will some person kindly furnish a full explanation of the meaning and character of this style of composition?

L. N. W.

PEKING, Sept. 1st, 1870.

SOLITAIRE.*

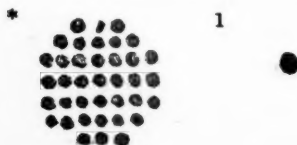
NOTE 27.—The following are twenty different games devised by the Professor of Mathematics in *Tung-wên-kuan*, Peking, on the Solitaire 獨奕棋二十句. He was asked one day to remove all from the board, save one, according to the rules prescribed in this game. He wrought it out mathematically in his mind and sent in the solution of it next morning. Besides this, he added nineteen other problems on the Solitaire and gave them poetic names.†

J. D.

PEKING.

Mode of Play—When one chessman is moved one must be taken away. The first one may either take one away or borrow one. 其法: 跳一子則去一子首一子或先去一子或先借一子均可.

1.—建中立極 To be placed in the centre and stand at the outmost edge. 中一子 The first spot in the centre.



† [We are indebted to Ho Achun Eaq. Linguist in the Imperial Customs of Foochow, for a translation of the Poetic names and other Chinese expressions found in connection with this game. ED. CH. REC.]

2.—孤月長明 The only moon is continually bright. 中第三子 The third spot in the centre.

3.—巫峰疊翠 Successive beauties of the Peaks of Wu 巫 (name of mountain).

4.—重規疊矩 Rules in Succession.

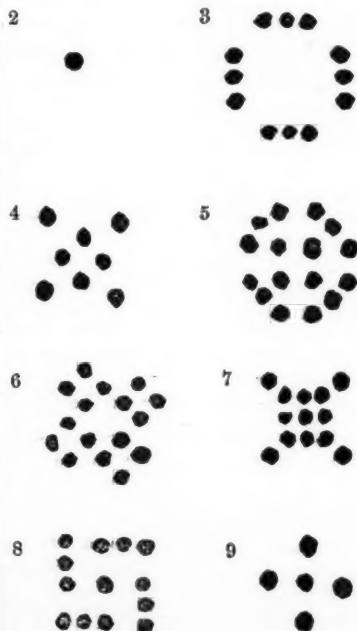
5.—花繞錦城 Flowers around the figured city.

6.—香輪四照 The fragrant disk shines in four points.

7.—國富民安 The country is rich, and the people in peace.

8.—迴欄覓句 To walk around the balustrade and search for quotations.

9.—五星聚奎 The five Planets are assembled at the star *Kwei*.



10.—洞仙祝壽 The Grotto Genii implore blessings of longevity.

11.—乚字迴文 Crooked lines of the character Wan.

12.—丹桂飄香 The cassia tree brings forth its fragrance.

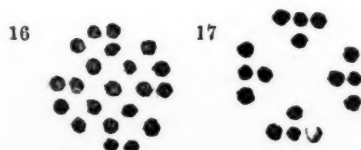
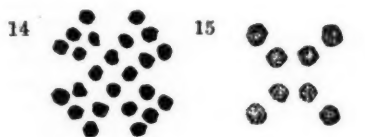
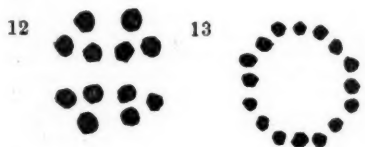
13.—富貴蟬聯 Continual riches and honors.

14.—五穀豐登 The five kinds of grain are plenteous.

15.—賓于四門 To go every where and invite the virtuous.

16.—瓏玲漢佩 Beautifully carved gems, worn in Han dynasty.

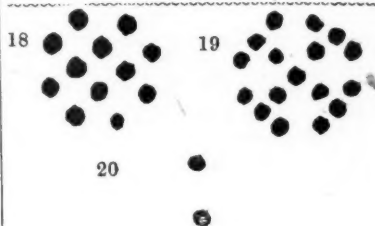
17.—四海歸心 Four seas return to submission.



18.—鉤心鬪角 To hook the middle and strive for the corners.

19.—疏影橫斜 Cross and slanting open-shadow, (speaking of the shadow of the Mei-hua.)

20.—舜陞賡歌 Singing with each other at the steps of the Emperor Shun's palace. 中第二第五子 The second and fifth spots in the centre.



QUERY.

QUERY 37.—Pe-ting-hai 白亭海 is I believe the name given to lake Balkish in Chinese Books. Can anyone furnish a few examples to prove it was also known to the Chinese as the Western sea? Seao-hai is a name sometimes given to the Caspian sea. Was it likewise known as the Western sea? Can examples also be furnished to prove that the Mediterranean was known to the Chinese as the Western sea?
GEO. PHILLIPS.

REPLY.

Reply to Note No. 1.—On Confusion of Names. Pei-p'ing 北平 is Pei-ching 北京 (Peking). It is one of the old names of this capital. It is sometimes also termed Shun-t'ien-fu and on the removal of the capital in the Ming dynasty by Yung-loh, it became the Northern Court in contradistinction to Nan-ching or Southern Court. There is no city in Chibli (the province of Direct Rule, a variable designation, changing with the change of the Capital from one province to another) bearing the names of Tsun-chau-fu. The characters are not given and consequently difficult of identification. There is a Tsun-hwa-chau 遵化州. 建業

Chien-yeh or Tu is applied to Peking, and Nanking and to every capital, where the Emperors have established their court. It is not applied exclusively to the department around Nanking and in which it is situated. Nanking contains like Peking two Hsien; *Shang-yuen-hsien* and *Chiang-ming-hsien*, both situated in *Chiang-ning-fu*. The two Pekinese Hsien are called *Ta-hsing-hsien* and *Wan-ping-hsien*, comprehended in *Shun-tien-fu*. There does not appear the slightest confusion in these designations—every Chinaman knows them and most foreigners are acquainted with them.

PEKING.

J. D.

DEATH.

At Peking, January 2nd, 1871, MARY ELLA, daughter of REV. L. N. and M. E. WHEELER, aged 5 months and 27 days.

BIRTHS.

At Hankow, January 9th, 1871, the wife of the REV. E. BRYANT, of the London Mission of a daughter.

At Canton, November 27th, 1870, the wife of the REV. S. WHITEHEAD of a daughter.

At Canton, January, 2nd, 1871, the wife of the REV. WM. MCCLESNEY of a son.

JOTTINGS AND GLEANINGS.

DELINQUENT SUBSCRIBERS. We learn from several agents that they have difficulty in collecting subscriptions from some subscribers. We are sorry that such should be the case. We would remind them that the subscription for the RECORDER is *payable in advance*. We cannot afford to lose any subscriptions after having sent the RECORDER as ordered, nor can our agents afford the time and trouble of repeatedly calling upon delinquents for the pittance due. We ask all who are in arrears for the RECORDER to pay up promptly and to pay for the 4th volume on receiving the June No. if not previously paid.

IMPORTANT INSTRUCTIONS TO AGENTS. We request our Agents hereafter to report to us only the names of those subscribers who have already paid. *Let new subscribers be reminded, if necessary, that payment is expected and required in advance, and that their names will not be forwarded to the Editor until they have paid.*

Our printers expect us to keep them supplied with printing paper for the RECORDER, and to pay promptly their bills for services rendered every month. The Importance of prompt payment on the part of subscribers, under these circumstances, must be apparent to all.

REMARKABLE NON-COINCIDENCES: OR EXTREMES DO NOT MEET. An agent recently ordered the copy of the Recorder sent to a certain subscriber to be discontinued, giving the reason that the gentleman said 'he had married a wife, and must curtail expenses.' Another agent, month's ago, wrote that a

certain gentleman was inclined to discontinue the RECORDER, because his wife had just left on a visit to her native country. Query: which was the better reason? Or were neither of them good and valid?

MISSIONARY INTELLIGENCE: A cover containing an item under the above heading has been received, minus date, or name or initials of writer. We are sorry the writer did not supply his name. We do not know a Journal that admits communications which are not accompanied by a responsible name. We referred to this subject on 3rd page of cover in the November No. The name of the writer of an item of News &c. or Article is needed *not necessarily for publication but as a guarantee of good faith*. If the writer of the item will supply his name we will gladly insert it, as we are sadly deficient in items of Missionary Intelligence. That department was once the most highly prized of all the contents of the RECORDER by not a few subscribers, who look now a days in vain for it.

ITEMS FROM NINGPO. We learn that Dr. McCartee is getting ready his Hospital (for Women and Children) and Children's Home at Ningpo, and hopes soon to have it in full operation. Mr. and Mrs. McCartee arrived at Ningpo December 12th. Since that time Mr. and Mrs. Elwyn of the English Church Missionary Society have gone to Hangchow. Mr. and Mrs. Valentine, of the same Mission, are about starting for Shaohing, to be associated there with Mr. Grettan. Mr. Butler of the Presbyterian Mission has gone to Shanghai to take charge of the Presbyterian printing establishment there, Mr. Wherry being transferred to Shan-tung. Mr. and Mrs. Crossette of the same Mission who (with Mr. and Mrs. Fitch) arrived from the United States of America in December have gone to Shantung, and Mr. and Mrs. Fitch to Shanghai. Rev. Mr. Goddard has returned from Canton, with Mrs. Goddard, the daughter of Wm. Dean, D. D. of Bankok. The Hospital and Children's Home are supported by a Society in New York. The Presbyterian Board continues the salary of Dr. McCartee, and he retains his status in the Mission, although neither the Board nor the Mission have any direct control over the Hospital and Home. The Board have nevertheless expressed their sympathy with the undertaking and granted to him the use of two of their largest buildings for hospital purposes, rent free.

ITEMS FROM HANKOW. Under date of January 14th, our correspondent writes:—The Rev. F. P. Napier has embarked for England per S. S. *Achilles* leaving Shanghai on the 24th December 1870. Dr. Smith has also left Hankow, but is detained in Shanghai by his literary work.

The new Chapel of the London Missionary Society on one of the principal streets of Wuchang has been opened. The opening Service was largely attended. All the Missionaries in Wuchang and Hankow were present and a large body of native Christians. It was indeed one of the finest gatherings we have seen. On Christmas Day also the new Chapel of the American Episcopal Mission in Wuchang was opened, when 10 new Converts were received into the Church by baptism in the presence of the native Church and a goodly number of the Day School children. [Dr. Smith has since left per *S.S. Nestor*, *via* Foochow.]

THE CHINESE AT TIENTSIN. A missionary in a private note says: The Chinese are very sullen, and many queer reports are brought to us, but I have every confidence that we shall be permitted to go through the winter without molestation. We are having vexatious delays with the chapels and our claims for losses.

THE CHINESE RECORDER AND MISSIONARY JOURNAL is issued monthly at Foochow, China. It is devoted to the Extension of Knowledge relating to the *Science, Literature, Civilization, History, and Religions* of China and adjacent Countries. It has a special department for *Notes, Queries and Replies*. The numbers average at least 28 pages. Single copies \$2.00 per annum in advance without postage. Subscriptions should begin with the June number (1st No. of Vol. 3), and be made through the Agents of the RECORDER, as the Editor cannot keep separate accounts with subscribers. For names of agents, see Cover.

REV. JUSTUS DOOLITTLE, EDITOR.

TERMS OF THE CHINESE RECORDER, when mailed postage paid, to any of the ports of China, or of Japan, or to Australia, India, Java, Manila, Siam, Singapore and the United States \$2.25—*to* England *via* Southampton, \$2.50—*to* Germany and Belgium, *via* Southampton \$3.00—*to* France, *via* Marseilles \$2.00 (prepayment of postage being impossible.) Paid in England, eleven shillings, sent *via* Southampton. Paid in the United States in currency and sent *via* Pacific Mail \$3.00. Anything offered for publication as Articles, Notes, Queries, and Replies, &c., may be sent direct to the Editor of the CHINESE RECORDER, Foochow.

The Editor is not responsible for the views expressed by contributors. New books, and pamphlets relating to China and the Chinese if sent to the Editor will receive prompt notice.

TERMS FOR ADVERTISING. On the cover, for ten lines or less, eight words to a line if printed closely together, for the first insertion *fifty* cents, for each subsequent insertion, *twenty-five* cents.

FOOCHOW WEATHER TABLE FOR DECEMBER 1870, BY A. W. C. R.

THERMOMETER.									BAROMETER.		REMARKS.*
Max.	Min.	9.30 A.M.			3.30 P.M.			9.30 A.M.	3.30 P.M.		
		Dry.	Wet.	Dew point.	Dry.	Wet.	Dew point.				
1	69.5	62	65.5	64	3	67	60.5	12.5	30.555	30.510	Rain A. C.
2	63	55	59.5	52	15	61	53.5	14.5	710	605	C.
3	67.5	48	58.5	53.5	10	66.5	57	17	670	550	F.
4	68	48	58.5	53.5	10	64	55.5	17.5	740	630	F.
5	62.5	50	59	53.5	11	61	50.5	20.5	810	680	F.
6	69	50	56	50.5	11	68	59.5	17	710	545	C. A. F.
7	73	51	63.5	57	13	69	58.5	21.5	610	575	F.
8	60.5	52	57	49.5	15	60	52	16	830	730	F.
9	63	44	55	50	11	62	54	16	735	575	F.
10	63	45	55.5	51	9	60.5	53	15.5	760	675	F.
11	62.5	46	55	50	5.5	58	50	15	790	675	F.
12	62	42	54.5	49	11.5	61	50.5	20.5	740	645	F.
13	65	42	52.5	47.5	10	64.5	55	15.5	780	660	F.
14	68	49	53	52.5	11.5	66	58	15.5	755	650	C.
15	68.5	50	59	55	8	67	57.5	18.5	740	605	F.
16	69	48	56.5	53.5	6	68.5	55	7	630	480	F.
17	73	49	69	55	8	73	62	21.5	560	440	F.
18	60.5	53	58	54	8	57.5	53	9	725	675	C.
19	68	52	58	54	7.5	67	63	8.5	645	485	C. A. F.
20	70.5	53	58.5	56.5	4	70	64	12	530	335	C. A. F.
21	76.5	55	66.5	63.5	6	76	65	22	465	285	F.
22	62	56	59.5	...	...	60	...	...	590	520	C.
23	59.5	51	57	...	...	56	...	...	655	635	C.
24	53	44	48	...	...	52	...	...	835	720	C. A. F.
25	...	36	47.5	...	...	...	...	...	660	.....	F.
26	64.5	34	44	...	...	62.5	...	...	575	450	F.
27	64	39	51.5	...	...	63	...	...	685	555	F.
28	59	52	56.5	...	...	58	...	...	680	550	R.
29	63	52	57	...	...	63	...	...	500	355	C.
30	59	52	57.5	...	...	55	...	...	625	560	C.
31	54.5	48	53.5	...	...	54	...	...	690	580	C. A. F.

* ABBREVIATIONS.—A. afternoon, C. cloudy, F. evening, H. heavy, F. fine, fr. from, L. lightning, Lit. little, M. morning, R. rain, T. thunder, S. showy, Ra. rather.
The Wet bulb thermometer has been out of order the last few days.

(Continued from page 249)

Another name is 土萆薢 *Tu-pi-pa* (indigenous Pi-pa or Long pepper,) another

扶惡土萆藤 *Fu-ô-tu-lou-têng* (the character Têng means twining shrub, the other characters express probably a foreign name.) Another Synonym is 扶櫛

Fu-lin or 扶櫛藤 *Fu-lin-têng*, about the origin of which, Li-shi-chên declares, he knows nothing. These names do not resemble any name given to this by other Asiatic people. The Sanscrit name of the Betel-plant is, according to the Amerakocha (l. c. p. 105) *nagaralli*, the name of the leaf is *tambulacalli*. The Arabians call it *tenbol* (cf. Ibn Batuta l. c. II 204.)—Büshing (Asien II 764-783,) states that at Malabar the Betel-leaf is called *Wettilei*; the Indo-perian name is *pan*. Bontius states regarding Betel (l. c. p. 90.) "Folia ista quae Malaii *Sirii* vel *Sirii*-boa vocant, Javani *Betel*."

Among the Chinese works quoted in the Pên-ts'ao about the Betel-pepper the Nan-fang-ts'ao &c., (4th century) is the most ancient. The description of the plant, given by the Chinese authors of various times is the following. The plant climbs like the cucumber, the leaf is large, thick, shining and of a pungent, aromatic taste. The fruit resembles that of the mulberry, but it is of a long shape, several inches long. These leaves are eaten together with the Pin-lang (Areca-nut) and calcined oyster shells. It has the property of expelling distemper and to make one forget sorrow. In Ssü-chuan an inebriating beverage is made from the

萆葉 *Lou-ye* (leaf of the Betel-pepper).

As regards the native countries of the Betel-pepper the Chinese authors notice *Kiao-chou*, *Ai-chou* (Annam see the foot note above.) An author of the 11th century states, that the plant grows in *Kui-chou* (Ssü-ch'uan) in *Ling-nan* (Kuang-tung, Kuang-si.) According to other authors it is also found in *Yün-nan*. The Pên-ts'ao, states further, that there are several kinds of Betel-pepper. The Ch. W. gives (XXV p. 45) a tolerably good drawing of the Chavica Betel under the name of *Kü-tsiang* and represents (XXV 49) the *Lou-ye* as a different climbing plant with large heart-shaped leaves. I am not able to state, whether the true Betel (Chavica Betel) thrives in Southern China as the Catholic missionaries assert (Grosier la Chine II 525.) Benthani in his Flora Honkongensis mentions several species of Chavica, namely *Chavica sarmentosa* (formerly determined as Chavica Betel by Seemann,) found also in Java, Bor-

neo, New Guinea, and adds, that, besides the shape of the leaves, this is at once known from the Chavica Betel by its remarkably short spikes. Is this the Betel used by the Chinese for Betel chewing?

Crawford (History of the Indian Archipelago) is of opinion, that the use of Betel as a masticatory, originated in the Sunda islands, and has spread from thence to the Asiatic continent. The antiquity of the use of Betel among the nations of Southern Asia can not be determined with certainty. The Persian historiographer *Ferishta* states, that about 600 A. D. in *Kanyakubja*, the capital of the Duab (Northern India) there were 30,000 shops, which sold the Betel-leaf (*pan*) Cf. Ritter, s Asia IV I. p. 859. *Ibn Batuta*, an Arabian traveller, who visited Hindostan in the 14th century, describes the process of Betel chewing there (l. c. II. 204). He calls the Betel-leaf *Tenbol*. The names Areca and Betel, generally used by European writers to designate the nut and the leaf, were introduced by Pigafetto, the companion of Magellan, the circumnavigator of the globe, 1519-22. Pigafetto states (Sprengel l. c. IV. 53.); "the inhabitants of the Messana island (Philippines) cut a pearlike fruit, which they call *Areca* into four pieces and roll them up with a Laurel-like leaf called *Bettre*. This is chewed by them &c."

The Betel is now-a-days much used as a masticatory in the Southern provinces of China. Even at Peking the Areca-nut is well known and sold everywhere in the streets. But as the Betel-leaf used for chewing must be in a fresh state, the Chinese in the Northern provinces restrict themselves to eating the Betelnut alone. The practice of Betel chewing was not known by the Chinese in ancient times, at least it is not mentioned by the writers of the Han dynasties. But in the History of the Post-Han (25-221. A. D.) mention is made of very distant islands, inhabited by the 黑齒 *Hei-chi* (blacktoothed men). This seems to be an allusion to the nations, which chew Betel (Cf. my article Fu-sang, Chinese Recorder III. p. 114).

The Long pepper, Chavica Roxburghii, is also mentioned in Chinese books. The Pên-ts'ao describes it very correctly (XIV. 44) under the name of 萆薢 *Pi-pa*. There it is said, that *Pi-pa* is a foreign name. A writer of the 8th century states, that the name of the plant in the Kingdom of 摩伽陀 *Mo-kia-to* (the ancient Maghada in the present province of Bengal) is 萆薢梨 *Pi-pa-li*, whilst in 拂菻 *Fo-lin* it is called 阿梨訶陀 *A-li-ho-to*. *Pi-pa-li* is the Sanscrit

name of Long pepper; another Sanscrit name is *Chavica* (Cf. Amarakocha l. c. I. 99.100). Bontius (l. c. p. 182) says: "Bengalenses Pimpilium nuncupant, quod nos, auctoritate græcorum Piper longum." To what language A-li-ho-to must be referred, I am not able to say. Fo-lin designates, as is known, the Greek Empire. The plant is described by the Chinese authors as follows: The pi-pa belongs to the Betel genus. The leaves are shining thick and circular and resemble the Betel-leaf, the stem is like a tendon, the root is black and hard. The flowers are white, appear in the 3rd month, the fruit is long, like a little finger, of a greenish, blackish colour. In the 9th month it is gathered and dried in the sun. Its taste is like *Hu-tsiao* (Black pepper). The 胡人 *Hu-jen* (Western Barbarians) like to mix it with their food. The plant occurs also in 波斯 *Po-ssu* (Persia) and in 嶺南 *Ling-nan* (provinces of Kuang-tung and Kuang-si) where it grows in Bamboo-forests. This description suits quite well with the *Chavica Roxburghii*, a climbing plant with oval shining leaves, which is largely distributed in India. Long pepper consists of the spikes of flowers, which, while yet immature, are gathered and dried in the sun. There spikes and the roots are employed as medicine by the natives. The Jesuits confirm the statement of the Pên-ts'ao, that Long pepper is produced also in Southern China (Cf. Grosier, la Chine, II. 525).

The Fathers Boym and Martini (17th cent.) assert further, that the common Pepper (*Piper nigrum*) is cultivated in the Chinese province of Yün-nan (Grosier, l. c. II. 519). The same is stated in the Pên-ts'ao, where Black pepper is described under the name of 胡椒 *Hu-tsiao* (XXXII. 9). There it is said, that in *Mo-kia-to* (Maghada) it is called 昧履支 *Mei-lü-chi*. This name can be referred either to *Maricha*, the Sanscrit name of Black pepper, or to *Mirch*, its name in Hindostani. I cannot find among the numerous Sanscrit synonyms of Black pepper, as given in the Amarakocha (l. c. I. p. 211.) a name, resembling the Greek *péperi*, from which originate all names of Pepper in the modern European languages. Hippocrates (5th century B. C.) states, that the Greeks received this product and the name *peperi* from the Persians. But the Persian name of Black pepper is *Filfil*. In my opinion the name *peperi* was wrongly applied in ancient times to Black pepper, for it seems to be derived from the Sanscrit *Pi-pa-lī*, which relates to Long-pepper.

3. 無漏子 *Wu-lou-tsu*.

The Date Palm. Phoenix dactylifera.

P. XXXI 22.

Shi-ming. Explanation of names. The Date Palm bears according to the Pên-ts'ao a great number of synonyms, of which Li-shi-chên gives the following explanations.

The tree is called 波斯棗 *Po-ssu-tsao* (Jujube from Persia) for it grows in Persia. (As regards *Po-ssü-kuo* I beg to refer to my article Chin. anc. geograph. names, Notes and Queries IV). The fruit is called 苦魯麻 *Ku-lu-ma*. (By these sounds the Persian name of the Date, being "Khurma" is rendered as correctly as possible by Chinese characters). The names 千年棗 *Ts'ien nien-tsao* (thousand years Jujube) and 萬歲棗 *Wan-sui-tsao* (ten thousand years Jujube) are an allusion to its vigorous growth and long-lived character. The names 番棗 *Fan-tsao* (foreign Jujube), 海棗 *Hai-tsao* (Ocean Jujube) and 海櫻 *Hai-tsung* (Ocean Palm) relate to its foreign origin and to the resemblance of the fruit to the Jujube (*Zizyphus vulgaris*). It is further called 金果 *Kin-kuo** (golden fruit) in allusion to its utility and high value.

Description of the tree. Li-shi-chên states, after a writer of the Ming (1368-1644), that near *Chêng-tu* (the capital of the province of Ssü-ch'uan) there are six *Kin-kuo* trees, of an aged appearance, planted at the time of the Han dynasty (about our era). They are 50-60 feet in height, three fathoms in circumference. The stem is erect like an arrow, without lateral branches. The leaves are like a phoenix tail. The bark resembles dragon's scales, the fruit is like a Jujube, but larger. Its foreign name is *Ku-lu-ma* (v. s.) The author adds, that the fruit becomes edible only (he speaks apparently of the Ssü-ch'uan fruit) after a treatment with honey and other complicated processes. —This description suits quite well with the Date-palm. It is known, that its stem is marked with scars, indicating the places from which the leaves have fallen away in proportion as the tree has grown in height, and at the top new leaves unfolded. These

* I must observe, that now a days the fruit of *Sail-buria adiantifolia* bears also the name of *Kin-kuo* (Jil-ko in Japanese.)

scales render it very easy to climb the tree. It is also true, that the Date resembles much the Jujube and for this reason also the Europeans call the large Chinese Jujubes, Chinese Dates. That the fruit of a Date-palm growing in Ssü-ch'uan cannot be edible is also easily understood; for it is a fact, that the fruits of the Date-palm ripen only in a rainless climate. Ch'eng-tu lies under the 30th degree of latitude, in a climate, which permits the thriving of a palm tree, planted in favourable conditions.

The *Kuang-kün-fang-pu* (Chap. 79 p. 14) quotes two works of the 12th century, which mention, also some rare trees, called *Hai-tsung* (Ocean Palm) at Ch'eng-tu-fu. There it is further stated, that once an attempt was made to transplant them to 金陵 *Kin-ling* (an ancient name for Nan-king.) But they could not grow in the climate of Nan-king and had to be brought back to Ch'eng-tu. These trees were carefully treated there and protected against injury by a wall.

The *Hai-tsao* (Ocean Jujube,) which is said by Li-shi-ch'ên to be identical with the Date-palm is described in the repeatedly quoted *Nan-fang-ts'ao* &c., (4th century) as follows: An erect tree without lateral branches. The branch-like leaves on the top of the tree diverge in every direction. The tree bears fruit only once in five years. The fruit is as great as a cup and resembles, a Jujube. The Kernel is not pointed at the ends, as the Jujube. It is rolled up from the two sides. The *Hai-tsao* is sweet and well tasted, superior to the Imperial Jujube in the Capital. In the year 285 A. D. Lin-yi (a kingdom to the South of China) (see above) offered to the Emperor Wu-ti (P'ien dynasty) 100 trees of the *Hai-tsao*. The prince *Li-sha* told the Emperor, that in his travels by sea he saw fruits of this tree, which were, without exaggeration, as large as a Melon (!)

Under the name of *Po-sso-tsao* (Persian Jujube) or *Wu-lou-tsu* the Date is first described in Chinese works of the 8th century. These authors state, that the tree is found in Persia, where it bears the name

窟莽 *Kü-mang* (probably a distorted transcription of *khurma*.) It is said to resemble other Palms, as regards the stem and the leaves, which do not fall in winter and are in shape like the leaves of the 土藤 *Tu-t'eng* (probably a Rattan.) It flourishes in the second month; the blossoms resemble the Banana blossoms. It opens grad-

ually (the spathe,) and some ten bunches spring from them. Each cluster (朵) has 20-30 fruits. The fruit is 2 inches in length, at first of a yellowish white colour and like the fruit of the 楝 *Lien* (*Melia Azedarach*.) It ripens in the 6th-7th month and then becomes dark, resembling the fruit of the 青棗 *T'sing-tsao* (dark Jujube) from Northern China, but the flesh (pulp) is crumbling. It is of a sweet taste like sugar and has the colour of the 沙糖 *Sha-t'ang* (brown impure sugar.) The kernel differs from the kernel of the Jujube by the absence of the pointed ends (the kernel of the Jujube is very pointed.) It is rolled up from the sides (隻卷) *(隻卷)*. The *Po-sso-tsao* is brought to China in vessels by merchants from those countries, where it grows.

The description here given of the Date-palm and particularly of the fruit and the kernel is very correct. There can therefore be no doubt, that the *Po-sso-tsao* is the Date. But it is clear, that many of the synonyms, as given in the *Pên-ts'ao*, relate often to other Palms, which is easily understood, for the Date-palm is not indigenous in Eastern Asia, and, although some Chinese writers assert, that it was planted here in ancient times,—now-a-days, I think, the Date-palm occurs nowhere in China. The *Pên-ts'ao* gives a good drawing of it, but the *Ch. W. (XXXII)* represents under the name of *Wu-lou-tsu* a palm with fan-shaped leaves. Nevertheless it is certain, that at the time of the T'ang dynasty (618-907) the Date-palm and its fruit were well known in China. Embassies were often sent from the Persians and the Arabians to the Chinese court and even Chinese envoys and travellers visited the Date growing countries. (See my article: Chinese Ancient Geographical Names in Notes and Queries No. 4.) During the Yüan dynasty (1286-1368) and the Ming dynasty 1368-1644 likewise relations existed between China and those countries of Western Asia.—Mr. Sampson quotes a Chinese author, who states, that the Dates (*Ts'ien-nien-ts'ao*) come from 忽魯謨斯 *Hu-lu-mu-su*. As I have proved in Notes and Queries (l. c. p. 53) the country here meant is *Ormuz* in the Persian Gulf. Ritter (*Asien VI* p. 724) is of opinion, that the name *Ormuz* is derived from the Persian word "*khurma*" (Date,) for the Date-palm grows plentifully on the shores of the Persian Gulf.

As regards the geographical distribution of the Date-palm it is a representative of the subtropical countries of Western Asia and the Southern littoral of the Mediterranean. It is confined to the more dry zones, where vehement rains do not exist. Therefore the Date grows plentifully in Northern Africa, Arabia, Southern Persia, Beloochistan, and the North Eastern corner of British India (Punjab, Lahore, Moulton.) But here is the Eastern limit of its distribution. To the South it can be found as far as Bombay, but here the fruits do not ripen.—In Persia it is only the Southern provinces, which produce dates, namely the littoral of the Persian Gulf and Kirman. The most Northern spot in Persia, where the Date is cultivated, is the oasis *Tubbes* in the great Salt-desert (about 34° latitude.) But at Ispahan, which has a more Southern position, I have not seen Date-palms. There is however in Mazanderan, (Ashref) near the shore of the Caspian sea a splendid Date-palm, which was planted by a Persian Shah, some centuries ago.—Bagdad (33° latitude) produces good Dates.

Mr. Sampson (l. c. p. 172) mentions a species of Chinese Phoenix (or Datepalm) in the following terms: "A species of Phoenix grows wild in Hongkong and generally near the sandy shores and slopes of the hills along the sea coast; it is often nearly stemless, but when suffered to grow to full development, has a cylindrical caudex of from two to six feet in height; this is referred doubtfully in the Flora Hongkongensis to *Ph. acaulis*, Roxb., but Dr. Hance (See-man's Journal of Botany, Vol. VII p. 15.) shews it to be *Ph. farinifera* Roxb." Mr. Sampson adds, that he is not aware that this plant has at all attracted the attention of the Chinese. But in Dr. Hance's *adversaria in stirpes Asiae orient.* p. 48, I find a description of this palm: "Species Hongkongensis generis *Phoenix*, quae videtur diversa ab omnibus, quas descripsit Grilith. Propinqua autem videtur *Ph. sylvestris*, Roxb. Crescit gregarie in petrosis aridioribusque collum lateribus." Dr. Hance adds, that the fructiferous spadices of this palm are sold in Macao under the name of "Areca de mato" (i. e. *Areca sylvestris*), and that the Chinese eat the farinaceous fruits, which however are very astringent. *Phoenix farinifera* is common all over India and grows almost together with *Phoenix sylvestris* (the wild Date.) The stem of *Ph. farinifera* yields in India a meal, a substitute for the true Sago. It is used especially in time of famine (Ritter, *Asien IV* p. 862.) Lamark mentions *Ph. farinifera* as growing also in Cochin China.

4. 櫻櫚 *Tsung-lü* *Chamaerops*,
and 蒲葵 *P'u-k'ui*, Fan Palms.

P. XXXV, 78. Ch. W. XXXV.

Shi-ming.—Explanation of names. A popular manner of writing the above name is 棕櫚 *Tsung-lü*. Both names are derived from 鬃櫚 *Tsung-lü* (horse-hair,) on account of the fibres, like horse-hair, which surround the bark. Another name of the tree is 枰櫚 *Ping-lü*.

Description of the tree.—The authors quoted in the *P'en-t'ao* about the *Tsung-lü* (for the most part writers of the 10th and 11th century) and Li-shi-chên himself, give the following description of it:

The *Tsung-lü* is a tree 10-20 feet in height, about the same thickness throughout, perfectly straight and branchless. The large leaves, which grow all from the top of the tree, spread out from thence, like a fan, in every direction. They resemble in shape a carriage wheel and do not fall in the winter. At first, when the leaves begin to unfold, they resemble the 白及*. The leaf-stalks are three-cornered. An author of the 8th century says, that in Ling-nan (Southern China, see above,) there are several trees, the leaves of which resemble the *Tsung-lü*, namely the *Ye-tsu* (*Cocos nucifera*), the *Pin-lung* (Betel-nut), the *Kuang-lang* (*Caryota spec.* see below), the *To-lo* (*Borassus*, see below,) the 冬葉 *Tsung-ye* and the 虎散 *Hu-san*.†

* The 白及 *Po-ki* relates to an *Amomaceae*, according to Tatarinow (*Catal. med. sin.*) Indeed the drawing of the *Po-ki* in the Ch. W. VIII 12 seems to represent a species of *Alpinia*.

† I am not able to state what trees are meant by *Tung-ye* and *Hu-san*.—of the *Tung-ye* (winter leaf,) the following short account is given in the *Nan-fang-t'ao* &c., (11th century.) The *Tung-ye*, called also 薑葉 *Kiang-ye* (Ginger leaf) or 苞苴 *Pao-tan* is used in Southern countries. The climate there is very hot and everything spoils quickly. This can be prevented by wrapping them in the leaves of the *Tung-ye*. Things can be preserved in this manner for a long time.

The 虎散 *Hu-san*, called also 古散 *Ku-san* is described in a few words in the *P'en-t'ao* at the end of the article *Kuang-lang* (XXXI p. 24.) There it is said, that from this tree canes are made. This is perhaps *Rhapis tabelliformis*, a palm native of Southern China, with fan shaped leaves. Lindley (*Treasury of Botany*) states about this palm, that it is said to yield the walking canes known as *Ground-Battans*. Mr. Sampson, however, says (l. c. p. 172) that

Below the place, where the leaves proceed, there is a fibrous integument, formed by several strata of entangled fibres. When one circuit has ceased growing, it forms a joint on the stem. The trunk is of a reddish brown colour; the wood is fibrous and veined. It can be used for stamps and for manufacturing domestic utensils. In the 3rd month, from amidst the leaves at the top of the trunk, there issue several yellow bunches, formed of young flowerbuds, in appearance like fishroe; therefore they are called 櫻魚 *Tsung-yü* (yü=fish;) another name is 櫻笋 *Tsung-sun* (sun=Bamboo sprouts.)

These bunches gradually expand and form a large panicle (花穗) of light yellow flowers. In the 8th or 9th month the fruits are formed. They are abundant and crowded together in large racemes. The fruit is about the size of a bean and of a yellowish colour as long as unripe, but when ripe black and very hard. The Chinese consider the *Tsung-lü* as a tree of great utility (大爲時利.) Besides the above mentioned use of the wood, the fibres are woven into various articles of domestic use, clothing, hats, cushions, mats to sleep on &c. Ropes are also made from the fibres, which do not receive injury by many years immersion in water. The Chinese authors state, that the fibres must be removed from the tree two or three times a year, for they hinder the growth of it. By omitting to do so the tree perishes. But the Kuang-kün-fang-pu (Chap. 79 p. II) counsels to cut off the fibres not too frequently, or the tree will be injured. The same work quotes an author of the 11th century who states, that in

蜀 *Shu* (the modern province of Ssü-ch'uan) the *Tsung-sun* (the flowerbuds of the tree, v. s.) gathered in the first or second month, are used as food, especially by Buddhist priests, who prepare them by boiling like Bamboo sprouts, &c.—The Pên-ts'ao states finally, that in Southern China, there can be distinguished two kinds of the *Tsung-lü* tree, the one bears a fibrous integument, used for making ropes, the other is smaller, without fibres; its leaves can be used for brooms. Some authors were of opinion,

Rhapis flabelliformis is known at Canton by the popular names 櫻竹 *Tsung-chu* (Palm bamboo) or *Chu-tsung* (Bamboo palm), and that it is a tree of no importance or celebrity. *Rhapis flabelliformis* is described in Benthani's *Flora hongkongensis*. The synonym *Rhapis lucanvortskii* Hern. Wendl. quoted therein seems to be derived from a Chinese name of the plant in the Southern dialect.

that this smaller kind of *Tsung-lü* and the 王簕 *Wang-sui* are the same. But *Li-shi-chên* proves, that *Wang-sui* is another plant, identical with the 地膚 *Ti-fu*.*

The *Tsung-lü* seems to be the only Palm known to the Chinese in the most ancient times, at least the character 櫻 *Tsung* occurs in the *Shan-hai-king* or "Hill and River Classic," which the Chinese attribute to the Emperor Yü (2200 B. C.) It is there said that at the 石萃 *Shi-tsui* hill and at the 天帝 *Tien-ti* hills a great many *Tsung* trees grow. The ancient Chinese Botany *Nan-fang-tsao* &c. (4th cent) mentions the tree as 櫻欄 *Ping-lü*.

As regards the geographical distribution of the tree in China, according to Chinese sources, the ancient Chinese works, quoted in the *Pên-ts'ao*, mention it as growing in Ling-nan (Southern China beyond the Meiling mountains) and Ssü-ch'uan. It is further said there, that it was planted also in Kiang-nan (the modern Kiangsi and Fukien,) but it did not grow easily. In the *Wu-lü-ti-li-chi* (T'ang dynasty 618-907) it is stated, that on the hills near 臨沅縣 *Lin-yüen-sien* there is an abundance of *Ping-lü* trees. [Up to the T'ang dynasty the modern *Wu-lin-sien* (Chang-tê-fu in the province of Hunan) was called *Lin-yüan-sien*. Cf. *Yi-tung-chi*.]

In the great geography of the Empire, *Yi-tung-chi*, and in the special description of the single provinces I find the following departments and districts mentioned as producing *Tsung-lü* trees.

Province of Che-kiang:—*Hang-chou-fu*—*Shao-sing-fu* (*Shan-yin-sien*)—*Tai-chou-fu* (*Ning-hai-sien*).—*Kü-chou-fu* (*Chang-shan-sien*).—*Yen-chou-fu* (in all districts.)

Province of An-hui:—*Chi-chou-fu*.—*Liu-an-chou*.

Province of Hu-nan:—The *Tsung-lü* tree is generally mentioned in the *Hu-nan-tung-chi*.

Province of Kiang-si:—*Nan-an-fu*.

Provinces of Kui-chou and Yün-nan (generally mentioned.)

Province of Kuang-si:—*Kui-lin-fu*.

* *Ti-fu* or 掃帚草 *Sao-chou-tsao* (Broom plant), P. XVI 44. Ch. W. XI. 31, is the *Kochia* (*Chenopodium*) *Scoparia*. This pretty shrub grows everywhere at Peking and is much cultivated also in gardens where it takes the shape of a dense bushy globe.

Mr. Sampson may be right in assuming, that the name 櫻 *Tsung* has become to some extent a sort of generic term in popular language for Palms in general. As the character *Tsung* is said in the Pên-ts'ao to be derived from another character meaning horse-hairs, I think, the Chinese apply it to all Palms, which yield horse-hair-like fibres, namely *Chamaerops*, *Livistonia*, *Rhapis*, *Caryota*. Mr. Sampson is also correct in stating, that the names *Tsung-lü* and the synonym *Ping-lü* relate not to one only, but to several Palms. The Chinese themselves distinguish several species of *Tsung-lü*. But it seems to me that, nowadays at least, these names relate more especially to the *Hemp-palm*, *Chamaerops Fortunei*. This is proved by the geographical distribution pointed out for the *Tsung-lü* or *Ping-lü* in the above quoted geographical works. The *Chamaerops* is the most Northern genus of Palms. *Ch. humilis*, the African and European representative of this genus, extends as far as Nice to the North (43° of lat.) *Ch. Palmetto* grows in Northern America, namely in Georgia. A third species is found in Japan and was described by Thunberg (1784) as *Chamaerops Excelsa* but mentioned much earlier by Kaempfer (1712.) Some 20 years ago Fortune detected in Northern China the Chinese *Hemp-palm*, named in the system *Chamaerops Fortunei*. But some botanists believe, that this is only a variety of *Chamaerops excelsa*. Fortune mentions repeatedly this beautiful Palm in his writings on China and gives also a good drawing of it. Fortune, in visiting the Tea countries in China, met with the *Hemp-palm* in the Northern provinces, namely in Chekiang, on the island of Chusan and in An-hui. He states, that near Ningpo the hills are covered with it. Fortune says further, that in the countries, where this tree is found, the Chinese agricultural labourers use the coarse brown fibre, obtained from the hairlike bracts (!) for making ropes, hats, bed-bottoms, and also the garment called So-e 蓑衣, known as, "raincoats" by Europeans, worn in wet weather and protecting perfectly from the rain. These accounts given by Fortune agree perfectly with the above description of the *Tsung-lü* from Chinese sources. The Chinese say, that the *Tsung-lü* is a tree of 10 to 20 feet in height. According to Fortune the *Hemp-palm* grows to about 12-20 feet in height. All species of *Chamaerops* are more or less dwarfish palms. There can be no doubt, that the Palm tree *Tsung-lü* or *Ping-lü* mentioned by the Chinese authors as growing in the Northern provinces, namely Chekiang, An-hui, Hunan, Kiangsi, can be other than the

the Palm described by Fortune. But it is possible, that in Southern China, where the *Chamaerops* is not indigenous, (Fortune,) the name *Tsung-lü* is applied to other Fan-palms, which give fibres. Mr. Sampson states, that in the province of Kwang-tung, under the name of *Tsung-lü*, two kinds of Fan-palms are cultivated, a coarse leaved—*Livistonia chinensis* R. Br., and a fine-leaved. The latter is commonly, though whether correctly or not, Mr. Sampson is not prepared to say, said to be the *Chamaerops excelsa*, Thbg. Mr. Sampson says further, that the fine leaved species (*Chamaerops*,) when distinguished from the coarse (*Livistonia*) is termed 蒲葵 *Pu-k'ui*, the latter character giving its name to the fans, *Kui-shan*, into which its leaves are made. I am not aware, whether in China fans are made from the leaves of *Chamaerops*; Fortune does not mention it, and the Pên-ts'ao says also nothing about the manufacture of fans from the leaves of this Palm. But the Pên-ts'ao as well as the Kuang-kün-fang-pu describe *Pu-k'ui* as a peculiar Palm, growing only in Southern China, from the leaves of which fans are made, and distinguish it clearly from the *Tsung-lü*.

At the end of the article *Tsung-lü* the Pên-ts'ao states: But the 蒲葵 *Pu-k'ui* is a different palm. Li-shi-chên does not agree with the ancient Dictionary *Shuo-wen* (100 A. D.) which considers the *Pu-k'ui* identical with *Tsung-lü*. Li-shi-chên gives the short description of the *Pu-k'ui*, consisting of 13 characters, as found in the Nan fang ts'ao mu ch'uang (4th century). The *Pu-k'ui* resembles the *Ping-lü* (*Chamaerops*) but the leaves are finer. Fans can be made from them. The *Pu-k'ui* grows in 龍川 *Lung-ch'uan*, (Province of Kuang-tung, Hui-chou-fu).

I think the *Pu-k'ui* must be another Palm than the *Chamaerops*. The leaf fans made from the leaves of the *Pu-k'ui* palm, and known in commerce under the name of 葵扇 *Kui-shan*, (Cf. Dr. Williams' Commercial Guide p. 119) form an important article of trade. Mr. Sampson states: "The leaf fan is said to have been first introduced into use among the élite of the Northern provinces, during the Tsin dynasty (A. D. 265-419) when the barbarian people of the South are stated to have attached great value to the products of the *Tsung* tree; the wind from these fans was supposed to be peculiarly agreeable; and it appears, that at that time these leaves came into special repute, for it

is stated, that hats were made from them, which were worn by men of all classes and superseded the turbans formerly in use. In the manufacture of certain kinds of hats they are still employed in Canton. According to the *Kwang-tung Sin-yu*, in the preparation of leaves for fans, the finest are selected, soaked in water for a fortnight, and then redried by fire heat. This process gives them a smooth polish; they are then bordered with silk or rattan fibres and fastened at the junction with the stalk by brass pegs driven through plates of shell; just, indeed, as we find them at the present day."

The *Chamaerops Fortunei* has been introduced by its discoverer in England and is now also cultivated in France. It is perfectly hardy in the Southern parts of England and grows in the open air in the gardens of Cherbourg, Bordeaux &c. (Bull. d. l. soc. d'acclim. Juillet 1869). In Peking it is much cultivated, but not in the open air, the winter in Peking being very rigorous.

Loureiro describes also the *Chamaerops Cochinchinensis*, as growing in Cochin China. I am not aware, whether this is a true *Chamaerops* or rather another Palm.

Our European writers have often mentioned in their works on China the manufacturing of garments, mats, ropes &c. from palmfibres, but their accounts about the origin of these fibres present much confusion. Morrison (Dictionary of the Chinese language) says: the *Tsang* is a tree, of the bark of which the peasants make garments to defend them from the rain. Dr. Williams in his Middle Kingdom, I. 278, states: "The fan leaf palm (*Rhapis*) is cultivated for its leaves. The wiry fibres of the bracts (!) of the *Rhapis* are separated into threads and used largely for making ropes, cables, twine, brooms, hats, sandals and even dresses or cloaks for rainy weather. Dr. Williams' Commercial guide p. 83: The most of the coir is made from the bark of the Hemp-palm (*Chamaerops*). The loose bark is stripped off in large sheets from the trunk of the tree, and when steeped in water the fibres separate in short wiry threads of a dark brown colour. It is the material, from which the Chinese make mats, brooms, cordage, raincloaks &c."

Fortune states, that the raincloaks are made from the bracts of *Chamaerops*.

Finally I find in the Bull. d. l. soc. d'acclim 1862, No. 4, a very curious statement. There it is said: "à Canton il y a une espèce de Chanvre (!) appelée *Chamaerops excelsa* ou *Hemp aloès* (!) dont on fait le po lo ma

pu." Dr. Williams (Commercial Guide) states, that the Po-lo-ma-pu is made from the fibres of a *Corchorus*.

I am of opinion, that the textile fibres in question are neither obtained from the bark of palms, nor from the bracts of it. ("Bracts" is a botanical term used for the leaves placed immediately below a calyx and altered from their usual form). But, as the Chinese authors correctly state, the base of the leaf stalks (of several palms) is enveloped by a fibrous integument, the fibres of which are entangled and cross each other. These fibres seem to proceed from the base of the petioles. After the leaves have fallen off, the remains of the leafstalks and the leaf-sheets separate themselves in fibres and form the above mentioned network. This process I have observed myself on the specimens of *Chamaerops*, cultivated in Peking, but I am not acquainted, from my own observation, with the mode of obtaining these fibres by the Chinese for the purpose of manufacturing garments, ropes &c.

5. 桃椰子 *Kuang-lang-tsu*.

Caryota species.

P. XXXI 23, Ch. W. XXXI.

Shi-ming.—Explanation of names. The name *Kuang-lang* is said by Li-shi-chên to be derived from 光 *Kuang*=smooth and 榔 *Lang*=Betelnut, for the tree resembles in appearance the *Areca* palm and has a smooth stem (or wood). The wood especially is called 姑榔木 *Ku-lang-mu*. The synonym 麪木 *Mien-mu* (flour-wood) refers to the meal contained in the stem, the synonyms 董櫻 *Tung-tsung* (solid palm) and 鐵木 *Tie-mu* (iron wood*) have refer-

* This ironwood must, however, not be confounded with the *Ironwood* of Loureiro, *Bursera rufus*, since *Tie-li-ssu* (Flora Cochinchinensis), Grosier (la Chine II 289) and Dunalde (la Chine I p. 24) give the following description of it, after Loureiro and other misnomers:—This tree, which grows in several provinces of China, is as high as our oaks. It is remarkable for its wood, which resembles iron as regards the colour as well as its hardness and heaviness. It cannot float in the water. The tree belongs to the Leguminous order, has pinnate leaves, yellow flowers with 5 petals, 10 unequal stamens. The flowers are arranged in racemes, the fruit is a long pod, a little curved, roundish and contains several seeds. The Chinese use the wood as timber in all cases, where great loads must be supported and a great resistance is required. It is from the *Tie-li-ssu*, that the anchors of the Chinese ships are made. Dr. Williams in Bridgman's *China*, p. 441 quotes the *Tie-li-ssu* and the name of iron pear wood among Canton woods. But our botanists consider this tree, described by Loureiro under the name of *Borxyllum* as dubious. In *Benham and Hooker, Genera plant. I p. 44* it is said: "*Borxyllum* Lour. est genus valde dubium. Description auctoris

ence to the durability and strength of the wood.

I find the Kuang-lang first described in the Nan-fang-ts'ao &c., (4th century,) but mention is made of it in the History of the Post-Han 221-233 A. D. The Chinese authors describe this palm as follows:

The trunk is 50-60 feet in height, several fathoms (1) in circumference, upright, without lateral branches. The tree resembles the Ping-lü (Chamaerops) the Pin-lang (Areca

pluribus notis Cassiam refert. Icon. Rumphii dubie citata est Afzeliae species. Specimen Loureiroianum, errore quodam sub hoc nomine in Ho. Mus. Brit. servatum cum characteris Nepentham convolvit. Chinese books give but little information as regards the T'ie-li-mu. It is not mentioned either in the Pên-ts'ao or in the Kuang-kün-fang-pu. Only in the Chü-wu-ming &c. (descriptive part XXI b p. 100, article

欄木 Lü-mu) I found a short account of the T'ie-li-mu, taken from the Nan-yü-pi-ki, a description of the modern Kuang-tung province. There it is said:

In Kuang-tung there are three kinds of wood used in carpentry, the 紫檀 Tsu-tan, 花梨 Hua-li and 鐵力木 T'ie-li-mu.

An author of the 4th century says, that the 紫檀 Tsu-tan comes from Fu-nan (in India beyond the Ganges v. s.). The name Tsu-tan (red tan) is explained by the brown red colour of the wood and the resemblance of the tree to the Tan tree. The character Tan refers according to Hoffmann and Smittes (l. c.) to a *Caesalpinia*. The drawing of the Tan in the Ch. W. XXXV agrees quite well with this. 檀香 Tansiang is the Chinese name for Sandalwood. The Tsu-tan used at Peking is of a dark brown colour and very heavy.

花梨木 Hua-li-mu (the meaning of the characters is wood veined like pear-wood) is a common nanae. The book name of this tree is 欄木

Lü-mu. The wood is a little fragrant, of a brown red colour curiously veined. If the tree is old, the lines are more curved, on young trees they are straight. Delineations can often be found like coils. The tree grows in Annam and also in Hainan, mainly in T'ai-chin (Southern coast) Cheung-hai (North-western coast), Ling-shui (South-eastern coast.) I have already stated above, that the growth of Hua-li-mu in Hainan is confirmed by European writers. The Hua-li-mu, which is sold at Peking, is a very carefully valued wood of a brown colour. Cf. also Griseb. (l. c. p. 288).

As regards the 鐵力木 T'ie-li-mu (wood of the strength of iron) only a few words are dedicated to its description in the Chinese work. There it is said, that it is very durable and hard. The colour of the wood is at first yellow, but becomes after use, black. In the 黎山 Li-shan hills the people use it for the fuel. But when it arrives at the Northern provinces it becomes very dear. Li-shan here refers probably to Hainan, for the aborigines of the island are called 理 Li. But Li-shan is also a hill in Honan.

Catechu.) the Ye-tsü (Cocca-nut,) the Po-sü-ts'ao (Date-palm.) The wood is hard like Bamboo wood, of a dark brown colour, very durable. It is veined like the Hua-li-mu (see the foot note.) The centre of the trunk is humid and rots quickly. The joiners cut it into little pieces and make chess-boards from it. It is adapted also for shovels and spades. In some places the mariners use spears of Kuang-lang wood. On the summit of the tree, large leaf like branches and luxuriant racemes of greenish flowers proceed. The fruits can be gathered throughout the whole year. They resemble blackish pearls and are produced abundantly. One branch contains not less than 100 fruits and each tree has 100 of such branches, which hang down gracefully. The whole resembles an umbrella. Below the insertion of the leaves, there is a net-work of entangled horse hair-like fibres, resembling the fibres of the Tsung-lü (Chamaerops.) The Kuang-tung people collect and use them for manufacturing tissues. But they must be at first soaked for some time in saltwater in order to become fine. These fibres are also used for ship building. The author adds 不用釘線 "they use neither nails nor threads." Mr. Sampson explains this

passage by a quotation from Yule's Cathay: "Menentillus, a Dominican Friar, writing from Southern India in A. D. 1292, says: their ships in these parts are mighty frail and uncouth, with no iron in them, and no caulking." The bark of the Kuang-lang tree is very tenacious and flexible. It serves to make ropes. The Chinese authors, who describe the Kuang-lang, agree in stating, that within the bark of the tree a white flower (according to some authors of a yellowish red colour) is found, resembling pounded rice. It is said to be very nutritious. The Chinese say, those, who eat the Kuang-lang flour, will not suffer from hunger. In the provinces, where the Kuang-lang grows, corn is there not abundant and therefore people eat the Kuang-lang flour with cow's milk or bake it into cakes. The flour is found several inches beneath the bark. A large tree yields 100 Chinese pounds of it.

Ancient and modern writers agree, that the Kuang-lang grows in the Southern provinces of China. According to the History of the Post-Han (25-221 A. D.) the Kuang-lang tree is found in 句町縣 Kū-t'ing-sien (now-a-days Lin an-fu province of Yunnan) and flour is obtained from its trunk. The Nan-fang-ts'ao &c., (4th century) states Kiao-chi (Cochin China, v. s.) and 九真

Ki-chên as its native country. (Kiu-chên was at the time of the Han a district in the modern Annam. Cf. Li-tai-ti-li-chi IV, I.) Another ancient work (Yi-wu-chi.) says that the tree grows in 梓柯 Yang-ko, (Yang-ko comprised in ancient times parts of the modern provinces of Ssü-chuan, Hu-kuang, Kui-chou, Kuang-si: Cf. Biot. I. c.)—The Chung-nan-chi 14th century,) quoted in the Kuang-kün-fang-pu, says: in the three districts

(郡) of 梁水 Liang-shui, 興古

Sing-ku and 西平 Si-ping there grows

little corn. But the Kuang-lang which yields flour is found there. These three districts comprised in ancient times the Western part of the modern Kui-chou province and the North Eastern part of Yünnan. (Cf. Li-tai-ti-li-chi IX 4, XII 10, XIII, 2). Su-sung (an author of the 11th century) states, that the Kuang-lang grows in Ling-nan (v. s.) and in all districts of Kuang-tung and Kuang-si, where it is much cultivated in gardens. Li-shi-chên indicates Ssüchuan, Kuang-tung, Kuang-si, Annam as the native countries of the Kuang-lang.

According to the great geography of the Empire and the special descriptions of the single provinces I find the Kuang-lang mentioned as a product of the following provinces and districts.

Yünnan. Kai-hua-fu—Kuang-si. Nan-ning-fu, Wu-chou-fu, Ssü-chêng-fu, Chên-nang-fu.—Kuang-tung. According to the Kuang-tung-chi there is a hill 60 li to the North of Lien-chou, where a large number of Kuang-lang grow.—Ssu-chuan. Sü-chou-fu. The Kuang-lang here is found on the hills 石門山 Shi-mên-shan.

I am not acquainted myself with the palm, which the Chinese call Kuang-lang. But Mr. Sampson in his interesting article on palms gives some accounts of it, based upon personal inspection, which I may be allowed to quote here. Mr. Sampson identifies the Kuang-lang with a species of *Caryota*, which he saw growing abundantly in Shui-tung on the West coast, (Mr. S. does not say what West coast he means), and which is planted at Canton in monastic and temple grounds for ornament. Along the bank of the West River it is abundant, and may frequently be seen rearing its graceful head above the other trees of natural woods; on the border of Kuang-si is a magnificent grove formed entirely of these trees. In Canton the *Caryota* is almost always called *Tung*. (But as has been pointed out in treating of the Fan palm this is in popular language a generic term for Palms, which

yield horse-hair like fibres). The name Kuang-lang is (now at Canton) seldom given to the *Caryota* tree, but the fruits of it are sold in druggist's shops under the name of *Kuang-lang-tau* (Tsü-seed). The identity of the *Caryota* with the Kuang-lang of Chinese authors is not quite free from doubt, for the plates of this tree given in the Pên-ts'ao and in the Ch. W. (both represent a palm with fan shaped leaves) do not accord with the *Caryota*, and the statements of authors, that Sago is made from the pith of the tree, are not verified, as far as Mr. S. can ascertain, by the practice of the Southern Chinese of the present day. But it must be remembered, that the tree intended to be represented grew only in Southern China, in Cochin China and perhaps other adjacent countries, the whole of which territory was, at the time, when the original accounts of the tree were written, loosely classed as the Barbaric states of the Southern ocean; it is highly probable therefore, that the Northern Chinese authors never saw the tree, and only figured it in accordance with imperfect descriptions, filling up the gaps by drafts on their own imagination.—As regards the flour obtained from the pith of the tree, according to the Chinese, there is nothing at all improbable in the statement, that a *Caryota* can yield a farinaceous product, for another representative of this genus (*Caryota urens*) in India is known as a Sago yielding Palm. In addition to this the *Caryota* is the only Palm in Southern China according to Mr. Sampson, to which the Kuang lang can be referred.

Mr. Sampson states: The most important product of the Kuang lang at the present day is the fibrous sheaths or bases of leafstalks; this is the *Tung* fibre of native commerce of Canton. It is principally imported from Kuang-si. Mr. S. describes the raw material as follows: they are in the form of an isosceles triangle, about eighteen inches in length and ten inches wide at the base; they are composed of fibres, longer than those of the Coconut tree, crossing each other in two directions with considerable regularity; the apex, which represents the lower end of the leafstalk, becomes somewhat ragged, and the base, which represents the downward continuation of the leaf stalk forming a portion of the trunk, is covered with a fine thin cuticle, which however soon wears off. The uses to which these fibres are put are manifold; the entire sheaths are employed in covering boxes, securely fastened down by small ropes made of the same material; some of the ropes used in ships, and smaller ropes for all purposes, are twisted from the fibres, and are said to be remarkable for their power of resisting the injurious effects of long immersion in the water. Brooms are also made from them.

(To be continued.)

